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VOL. XVI.

TRANSACTIONS

OF THE

OBSTETRICAL SOCIETY

OF

LONDON.

VOL. XVI.

FOR THE YEAR 1874.

WITH A LIST OF OFFICERS, FELLOWS, ETC.

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1862 CHURCHILL, FLEETWOOD, M.D., Professor of Midwifery, King's and Queen's College of Physicians, Ireland; 15, Stephen's green north, Dublin.

1862 MCCLINTOCK, ALFRED H., M.D., late Master of the Lying-in Hospital; 21, Merrion square north, Dublin.

1862 DUNCAN, JAMES MATTHEWS, M.D., A.M., F.R.S. Ed., Lecturer on Midwifery and Diseases of Women and Children, Surgeon's Hall; 30, Charlotte square, Edinburgh.

1870 FARRE, ARTHUR, M.D., F.R.S., Physician Accoucheur to H.R.H. the Princess of Wales; 12, Hertford street, Mayfair.

1862 HALL, ARCHIBALD, M.D., Professor of Midwifery, University of McGill College, Montreal, Canada.

1871 KEILLER, ALEXANDER, M.D., F.R.S. Ed., Physician to the Royal Maternity Hospital, Lecturer on Midwifery and Diseases of Women and Children at the Surgical Hall, Edinburgh.

Elected

1871 KIDD, GEORGE H., M.D., F.R.C.S.I., Obstetrical Surgeon to the Coombe Lying-in Hospital, and Examiner in Midwifery at the Queen's University and Royal College of Surgeons of Ireland; 30, Merrion square south, Dublin.

1871 TRACY, RICHARD T., M.D., Lecturer on Obstetrics at the University of Melbourne, Physician to the Lying-in Hospital, Melbourne, Victoria. [Deceased.]

1870 WEST, CHARLES, M.D., F.R.C.P., Physician to the Hospital for Sick Children; 61, Wimpole street, Cavendish square.

FOREIGN SUBJECTS.

1872 BARKER, FORDYCE, M.D., Professor of Clinical Midwifery and Diseases of Women at the Bellevue Hospital Medical College, and Obstetric Physician to the Bellevue Hospital; Consulting Physician to the New York State Woman's Hospital, &c.

1863 BRAUN, CARL, M.D., Professor of Midwifery, Vienna.

1862 CHANNING, WALTER, M.D., late Professor of Midwifery in the University of Cambridge, 17, Blacon-street, Boston, U.S.

1863 DEPAUL, JEAN ANNE HENRI, M.D., Professor of Clinical Midwifery, Paris.

1863 FAYE, F. C., M.D., Professor of Midwifery in the University of Christiania.

1864 HECKER, C., M.D., Munich.

1866 HUGENBERGER, THEODOR, M.D., à la Maternité et aux Enfants Trouvés Hôpital des Accouchements, Moscow.

1866 LAZAREWITCH, J., M.D., Kharkoff, Russia.

1863 MARTIN, EDUARD, M.D., Director of the Institute for Clinical Midwifery at the University, Berlin.

1864 PAJOT, CH., M.D., Professor of Midwifery to the Faculty of Medicine, Paris.

1866 RIZZOLI, FRANCESCO, M.D., Bologna.

Elected

1862 Scanzoni, F. W. von, M.D., Professor of Midwifery, Würzburg.

1864 Sims, J. Marion, M.D., late Surgeon to the Women's Hospital, New York.

1872 Spiegelberg, Otto, M.D., Professor of Clinical Midwifery, and Director of the Gynæcological Clinique in Breslau.

1866 Thomas, Abraham Everard Simon, M.D., Leyden.

1872 Thomas, T. Gaillard, M.D., Professor of Obstetrics in the College of Physicians and Surgeons, New York.

1862 Virchow, Rudolf, M.D., Professor of Pathological Anatomy in the University of Berlin.

CORRESPONDING FELLOW.

1873 Martin, A. E., M.D., Berlin.

ORDINARY FELLOWS.

FEBRUARY, 1875.

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The letters O.F. are prefixed to the names of the "Original Fellows" of the Society.

Elected

1874 ADAM, A. MERCER, M.D., Bargate Lodge, Boston, Lincolnshire.

1869 ADAMS, THOMAS RUTHERFORD, M.D., Surgeon to the Croydon General Hospital; 1, Ottoman villas, St. James's road, West Croydon.

1859 ALDERSEY, William Hugh, M.B. Lond., F.R.C.S., South Hayling Island, Havant, Hants.

1871 ALDERSON, FREDERICK H., Southerton House, Dartmouth Road, Hammersmith.

1861 ALDRIDGE, JOHN PETTY, M.D., Shirley House, Dorchester.

1873 ALLEN, HENRY MARCUS, L.R.C.P. Ed., 38, Regency square, Brighton.

1859 AMSDEN, GEORGE JOHN, M.D., 85, St. Paul's road, Highbury, N.

1866 ANDREWS, HENRY CHARLES, M.D., 1, Oakley square, N.W.

1859 ANDREWS, JAMES, M.D., 149, Camden road, N.W.

1870 APPLETON, ROBERT CARLISLE, Toll Garel, Beverley.

1859 ARCHER, JOHN, F.R.C.S., 9, Carpenter road, Edgbaston, Birmingham.

1871 ARGLES, FRANK, L.R.C.P. Ed., Hermon Lodge, Wanstead, Essex, N.E.

1861 ARMSTRONG, JOHN, M.D., Green street green, Dartford, Kent.

Elected

O.F. Aveling, James H., M.D., Physician to the Chelsea Hospital for Women; 1, Upper Wimpole Street, W. *Council*, 1865-66, 1872. *Hon. Sec.* 1873. *Hon. Lib.* 1874-5.

1872 Ayling, Arthur H. W., 103, Great Portland street, W.

1859 Ayling, William Henry, L.R.C.P. Ed., 103, Great Portland street, W.

1873 Bailey, James Johnson, L.F.P. & S. Glasg.; Throstle Grove House, Stockport.

1864 Baker, G. Benson, 42, Grove road, St. John's wood, N.W.

1867 Baker, John C., M.D., F.R.C.S. Ed.; 6, Gambler terrace, Hope street, Liverpool.

1859 Baker, John Wright, Surgeon to the Derbyshire General Infirmary; 102, Friar gate, Derby.

O.F. Bannister, John Henry, 436, Oxford street, W.

1869 Bantock, George Granville, M.D., Physician to the Samaritan Free Hospital; 44, Cornwall road, Westbourne park, W. *Council*, 1874-5.

1874 Barber, Edward, 105, Devonshire street, Sheffield.

1874 Barber, Oliver, 89, Cemetery road, Sheffield.

1874 Barclay, John, M.D., 10, Low street, Banff.

1863 Barker, Edward, F.R.C.S., Senior Surgeon to the Melbourne Hospital, Victoria.

O.F. Barnes, Robert, M.D., F.R.C.P., Obstetric Physician to, and Lecturer on Midwifery at, St. George's Hospital; 31, Grosvenor street, W. *Vice-Pres.* 1859-60. *Council*, 1861-62, 1867-75. *Treas.* 1863-64. *Pres.* 1865-66.

1863 Barratt, Joseph G., M.D., 8, Cleveland gardens, Bayswater, W.

1871 Barrick, Eli James, M.D., Professor of Midwifery at Victoria University; 91, Bond street, Toronto, Ontario, Canada.

1861* Bartrum, John S., F.R.C.S., Surgeon to the Bath General Hospital; 41, Gay street, Bath. *Hon. Loc. Sec.*

1866 Bassett, John, M.D., Professor of Midwifery at the Queen's College, Birmingham; 144, Hockley Hill, Birmingham. *Council*, 1874-5.

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1873 Bate, George P., L.R.C.P. Ed., 412, Bethnal Green road, E.

1859 Bateman, Henry, F.R.C.S., 13, Canonbury lane, Islington, N.

1867 Batten, Rayner W., M.D., Physician to the Gloucester General Infirmary; 1, Brunswick square, Gloucester. *Hon. Loc. Sec.*

1859 Battye, Richard F., M.R.C.P. Ed., 6, Gloucester street, Belgrave road, Pimlico, S.W.

1871 Beach, Fletcher, M.B., Bethlem Hospital, S.E.

1871 Beadles, Arthur, 11, Park road terrace, Forest hill, Kent, S.E.

O.F. Beck, T. Snow, M.D., F.R.S., 7, Portland place, W.

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1871 Bell, Robert, M.D. Glasg., 50, Woodlands road, Glasgow.

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1872 Bethune, Norman, M.D., Professor of Anatomy, Trinity College, Toronto.

1868 Black, James Watt, M.D., Obstetric Physician to the Charing Cross Hospital; 15, Clarges street, Piccadilly, W. *Council*, 1872-4.

1874 Blair, William, M.D., 9, Abbey green, Jedburgh.

1861* Blake, Thomas William, Hurstbourne Tarrant, Andover, Hants.

O.F. Blake, Valentine W., F.R.C.S., Surgeon to the Birmingham and Midland Counties Lying-in Hospital; 6, Old square, Birmingham.

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1872 Bland, George, Surgeon to the Macclesfield Infirmary; Park Green, Macclesfield.

1866 Blease, Thomas, Clairville, Altrincham, Cheshire.

1860 Blood, Michael, 15, Portland place, St. Helier's, Jersey.

O.F. Bloxam, William, M.D., 21, Mount street, Grosvenor square, W. *Council*, 1875.

1874 Boddaert, Gustav, M.D., Surgeon to the Civil Hospital, and to the Lunatic Asylum, Ghent, Belgium.

1868 Boggs, Alexander, M.D., late of H.M.'s Madras Army, 13, Boulevard de Courcelles, Paris.

1872 Bosworth, John Routledge, Sutton, Surrey.

1866 Boulton, Percy, M.D., Physician for Out-patients to the Samaritan Free Hospital; 6, Seymour street, Portman square, W.

1869 Boyd, Herbert, Assistant-Surgeon, Indian Army, Fort William, Calcutta [agents, Henry S. King and Co., 65, Cornhill].

1872 Bracey, Charles J., M.B., Surgeon to the Birmingham and Midland Hospital for Women; 71, Hagley road, Edgbaston, Birmingham.

1873 Braithwaite, James, M.D., Assistant Surgeon to the Leeds Hospital for Women and Children; Clarendon road, Leeds.

1862 Braithwaite, William, M.D., late Lecturer on Midwifery, Leeds School of Medicine; Clarendon House, Clarendon road, Leeds. *Council*, 1869-70.

1875 Brewer, Alexander Hampton, 201, Queen's road, Dalston, E.

1862 Brickwell, John, Sawbridgeworth, Herts.

1872 Bridgewater, Thomas, M.B., Harrow-on-the-Hill.

1873 Briggs, George Chapman, 126, Euston Road, N.W.

1873 Briggs, Jacob Myers, M.D., Coeymans, New York.

1864 Bright, John Meaburn, M.D., The Glen, Forest hill, Sydenham, S.E. *Council*, 1873-74.

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1869 Brisbane, James, M.D., 30, Lisson grove, N.W.

1860 Britton, William Samuel, 53, Wellington road, St. John's Wood, N.W.

1871 Brockman, Edward Forster, Assistant-Surgeon, General Hospital, Madras, and Professor of Pathology, Madras Medical College, Madras.

1866 Brodie, George B., M.D., 56, Curzon street, Mayfair, W. *Council*, 1873-75.

1868 Brown, Andrew, L.R.C.P. Ed., Elton villa, Bartholomew road, Kentish town, N.W.

1874 Brown, Charles Robert, M.D., Beckville, Beckenham, Kent.

1866 Brown, George Dransfield, Henley villa, Uxbridge road, Ealing, Middlesex.

1866 Brown, Thomas, M.D., 236, Kennington park road, S.E.

1865 Brunton, John, M.D., M.A., Surgeon to the Royal Maternity Charity; 21, Euston road, N.W. *Council*, 1871-3.

1863 Bryant, Thomas, F.R.C.S., Surgeon to Guy's Hospital; 53, Upper Brook street, W. *Council*, 1866-67.

O.F. Bryant, Walter John, F.R.C.S., M.R.C.P. Ed., 23a, Sussex square, Hyde park gardens, W. *Council*, 1859.

1870 Buck, Joseph Randle, L.R.C.P. Ed., 26, Sidbury, Worcester.

1872 Buckingham, Charles E., M.D., Professor of Obstetrics in Harvard University; Consulting Physician to the Boston Lying-in Hospital; 53, Worcester street, Boston, U.S.

1871 Bulmer, Thomas Sanderson, M.D. Toronto; Reefton Hospital, Province of Nelson, New Zealand. [*Per* Mr. Arthur Tabor, Solicitor, 27, Leadenhall street.]

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1867 Burnett, Charles, M.B., Biggleswade, Bedfordshire.

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1862 Burton, John Moulden, F.R.C.S., Lee park lodge, Lee, Kent, S.E. *Council*, 1868-69.

1864 Butler, Frederick John, M.D., Surgeon to Winchester College and St. Cross Hospital, and to the Hants County Hospital, Winchester.

1870 Butler, John M., M.D., Physician to the Royal Kent Dispensary, and to the Woolwich Dispensary; 6, Queen's terrace, (28) Woolwich Common, S.E.

1868 Butler, William Harris, L.R.C.P. Ed., 15, Thomas street, Woolwich.

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1861 Candlish, Henry, M.D., Physician to the Alnwick Infirmary, Bondgate street, Alnwick, Northumberland.

1861 Candy, John, M.D., Staff-Surgeon, Army Medical Department. [*Per* Messrs. Price and Boustead, Army Agents, 34, Craven street, Strand, W.C.]

1872 Carless, Edward Nicholls, M.B., C.M., Lansdowne grove, Devizes, Wilts.

1866 Carless, John, M.D, Stratford lodge, Stroud, Gloucestershire.

1863 Carlyle, David, M.D., 2, The Crescent, Carlisle.

1861 Carter, Albert Pleydell, Wellington House, 43, London road, Gloucester.

1872 Carter, Charles Henry, M.D., B.A., B.S., Assistant Physician to the Hospital for Women; 8, Old Cavendish street, Cavendish square.

1869 Caskie, John Boyd, M.D., 89, Goswell road, E.C.

1869 Cass, William Cunningham, 20, St. George's road, S.W.

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1870 Causton, William Henry, Hepworth lodge, 3, Westcroft place, Hammersmith.

1863 Cayzer, Thomas, Mayfield, Aigburth, Liverpool.

1873 Chadwick, James R., M.A., M.D., Physician to the Department of Diseases of Women Out-patients, City Hospital, Boston; 123, Boylston street, Boston, U.S.

1873 Chalmers, John, M.D., 43, Caledonian road, N.

1864 Chambers, Thomas, M.R.C.P. Ed., F.R.C.S. Ed., Senior Physician to the Chelsea Hospital for Women, Consulting Physician Accoucheur to the Western Maternity; 2, Bolton row, Mayfair. *Council*, 1874-5.

1859 Chance, Edward John, F.R.C.S., Surgeon to the Metropolitan Free Hospital and City Orthopædic Hospital; 59, Old Broad street, City, E.C.

1862 Chapman, Walter, F.R.C.S., Lower Tooting, Surrey.

1867* Charles, T. Edmondstoune, M.D., Professor of Midwifery at the Calcutta Medical College, 10, Harrington street, Calcutta, *Hon. Loc. Sec.*

1874 Charlesworth, James, 27, Birch terrace, Hanley, Staffordshire.

1865* Charlton, Egbert, M.D., Fareham, Hants.

1863 Chavasse, Pye Henry, F.R.C.S., Priory House, 12, The Square, Birmingham.

1868 Child, Edwin, New Malden, Kingston-on-Thames, Surrey.

1863* Chisholm, Edwin, Camden, near Sydney, New South Wales. [Per Henry K. Edge, Esq., 34, Fenchurch street].

1872 Chittenden, Charles P. Downey, L.R.C.P. Ed., Assistant-Surgeon R.N., Haslar Hospital, and South Lodge, Lee park, Lee, Blackheath.

1859 Claremont, Claude Clarke, Millbrook House, 1, Hampstead road, N.W.

1861* Clark, James, M.D., 57, Regent's park road, N.W.

1859 Clark, James Fenn, 18, York terrace, Leamington. *Hon. Loc. Sec.*

Elected

1874 CLARK, JAMES HENRY, L.R.C.P. Ed., Long Hill, Goschen, P. O., St. Elizabeth, Jamaica.

1862 CLARKE, JOHN, Lynton, North Devon.

1872 CLARKE, WILLIAM MICHELL, late Surgeon to the British General Hospital; 2, York buildings, Clifton, Bristol.

O.F. CLAY, CHARLES, M.D., late Lecturer on Midwifery and Clinical Medicine in St. Mary's Hospital, Manchester; Audenshaw Lodge, Audenshaw, near Manchester, and 101, Piccadilly, Manchester. *Council*, 1863-65.

O.F. CLAY, JOHN, Professor of Midwifery, Queen's College, Birmingham; Allan House, 138-9, Steelhouse lane, Birmingham. *Council*, 1868-69. *Vice-Pres.* 1872-4.

O.F. CLEVELAND, WILLIAM FREDERICK, M.D., Stuart villa, 199, Maida vale, W. *Council*, 1863-64. *Vice-Pres.* 1875.

1861 CLOGG, STEPHEN, East Looe, Cornwall.

1865* COATES, CHARLES, M.D., Physician to the Bath General and Royal United Hospitals; 10, Circus, Bath.

1860 COCKELL, EDGAR, Holly lodge, Forest road, Dalston, N.E.

1859 COCKELL, FREDERICK EDGAR, 1, Alma villas, Dalston, N.E.

1861 COLLINGWOOD, WILLIAM.

1873 CONCANON, WILLIAM AUGUSTUS, L.K.Q.C.P. Ireland; Ladway Villa, Pill, near Bristol, Somersetshire.

1866 COOMBS, JAMES, M.D., Bedford.

1864 COOPER, GEORGE HENRY C., M.D., Surgeon to the Holloway and N. Islington Dispensary; Surgeon-Accoucheur to the Royal Maternity Charity; 35, Compton terrace, Islington, N.

1873 COOPER, FRANK W., Leytonstone, Essex.

1874 COOPER, HERBERT, L.R.C.P. Ed., Hampstead.

1861 COOPER, JOHN, M.R.C.P. Ed., Clapham rise, S.W.

1872 COOTE, MICHAEL, M.D., Quebec, Canada (and Grangewood Lodge, Burton-on-Trent).

Elected

1865 Copeman, Edward, M.D., Physician to the Norfolk and Norwich Hospital; Upper King street, The Close, Norwich. *Council*, 1869-71. *Vice-Pres.*, 1873-5. *Hon. Loc. Sec.*

1866 Cornwall, James, F.R.C.S., Fairford, Gloucestershire.

1860 Corry, Thomas Charles Steuart, M.D., Senior Surgeon to the Belfast General Dispensary; 9, Clarendon place, Belfast. *Council*, 1867. *Hon. Loc. Sec.*

1859 Cory, Frederick Charles, M.D., Portland villa, Buckhurst hill, Essex. *Council*, 1867-69.

1863 Coward, John W., Christchurch, Canterbury, New Zealand [agents: Messrs. Alfred Hill and Sons, 11, Little Britain]. *Hon. Loc. Sec.*

1869 Cox, Richard, L.R.C.P. Ed., Theale, near Reading.

1870 Craigie, John, M.D., 2, West Cliff cottages, Lyme Regis, Dorset.

1859 Croft, J. McGrigor A. T., M.D., M.R.C.P., 15, Abbey road, St. John's Wood, N.W.

1866 Croft, Robert Charles, L.R.C.P. Ed., 204, Camden road, N.W.

1874 Crombie, Charles Mann, M.B. & C.M., 9, Union terrace, Aberdeen.

1860 Cross, Richard, M.D., Carlton House, Belmont road, Scarborough, Yorkshire.

1869 Cross, Robert Shackleford, Petersfield, Hants.

1867 Croucher, Henry, West Hill, Dartford, Kent.

1859 Culpeper, William Moe, 1, Brunswick terrace, Palace gardens, Kensington, W.

1862 Cumberbatch, Laurence Trent, M.D., 25, Cadogan place, Belgrave square, S.W. *Council*, 1868-70.

1867 Cuolahan, Hugh, M.D., 9, Grange road, Bermondsey, S.E.

1859 Curgenven, J. Brendon, 11, Craven hill gardens, Bayswater, W. *Council*, 1870-72.

1868 Daly, Frederick Henry, M.D., 101, Queen's road, Dalston, N.E.

Elected

1870 Daniel, William Abbot, Kingston-on-Thames.

O.F. Davis, John Hall, M.D., F.R.C.P., Obstetric Physician to, and Lecturer on Midwifery and Diseases of Women and Children at, the Middlesex Hospital; Physician to the Royal Maternity Charity; Consulting Physician-Accoucheur to the St. Pancras Infirmary; 24, Harley street, Cavendish square, W. *Council*, 1859, 1864-65, 1869-75. *Vice-Pres.* 1861-63. *Pres.* 1867-68.

1863 Davis, Robert Alex., M.D., Resident Physician, County Asylum, Burntwood, near Lichfield, Stafford.

1873 Davison, Francis, L.R.C.P. Ed., Russel street, Armagh.

1859 Day, William Henry, M.D., Physician to the Samaritan Free Hospital for Women and Children; 10, Manchester square, W. *Council*, 1873-75.

1869 Dempsey, Joseph Maldon, M.D., 27, Charterhouse square, E.C.

1872 Denton, George Bagster, Surgeon to the Ladies' Charity and Lying-in Hospital; 2, Abercromby square, Liverpool.

1873 Desmond, Lorenzo E., M.D., 44, Irvine street, Edge-hill, Liverpool.

1860 Dickenson, John, F.R.C.S., Hon. Surgeon to the Wrexham Infirmary; Wrexham, Denbighshire.

1859 Dickson, Joseph, M.D., South View, Jersey.

1859 Dixon, John, M.D., Melbourne Lodge, Anerley road, Anerley, S.E.

O.F. Drage, Charles, M.D., Hatfield, Herts. *Council*, 1861-4.

O.F. Druitt, Robert, F.R.C.P., 8, Strathmore Gardens, Kensington Mall, W. *Council*, 1859-60. *Vice-Pres.* 1862-64.

1859 Druitt, William, F.R.C.S., Wimborne, Dorset.

O.F. Duncan, James, M.B., 8, Henrietta street, Covent garden, W.C. *Council*, 1873-74.

1859 Duncan, Peter Charles, M.D., 32, New Cross road, Hatcham Park, S.E.

O.F. Dunn, Robert, F.R.C.S., 31, Norfolk street, Strand, W.C. *Council*, 1860. *Vice-Pres.* 1861-62.

Elected

1871 Eastes, George, M.B., F.R.C.S., Surgeon-Accoucheur to the Western General Dispensary; 5, Albion place, Hyde park square, W.

1866 Easton, John, M.D., 19, Norfolk Crescent, Hyde park, W.

1867 Edis, Arthur W., M.D., Assistant-Physician-Accoucheur to the Middlesex Hospital; Physician to the British Lying-in Hospital; 22, Wimpole street, W. *Council*, 1873-74. *Hon. Sec.* 1875.

1861 Ellis, Robert, Obstetric Surgeon to the Chelsea, Brompton, and Belgrave Dispensary; 63, Sloane street, S.W. *Council*, 1868-70.

1862 Ellison, James, M.D., Surgeon to H.M.'s Household, Windsor; 14, High street, Windsor, Berks. *Council*, 1873-75.

1873 Engelmann, George Julius, A.M., M.D., 3003, Locust street, St. Louis, Missouri, U.S.

1873 Evans, Maurice G., M.D., Routh, Cardiff.

1871 Evans, Thomas Walter, 101, Heyworth street, Everton, Liverpool.

1865 Fairbank, Thomas, M.D., Surgeon to H.M. the Queen and the Royal Household, Windsor Castle; Moulsey House, Sheet street, Windsor, Berks.

1859 Faircloth, Richard, F.R.C.S., Newmarket, Cambridgeshire.

1869 Farquhar, William, M.D., Surgeon-Major, Madras Army, Bangalore, Madras Presidency. [24, Pembroke gardens, Kensington.]

1861 Farr, Geo. F., L.R.C.P. Ed., 20, West square, Southwark, S.E.

1868 Fegan, Richard, M.D., 1, Charlton park terrace, Old Charlton, Kent

1872 Fergusson, Alexander, F.R.C.S. Ed., Briarbank, Peebles, N.B.

Elected

O.F. Fergusson, Sir William, Bart., F.R.C.S., F.R.S., Sergeant-Surgeon to H.M. the Queen, Professor of Surgery in King's College and Surgeon to King's College Hospital, Consulting Surgeon to the Samaritan Free Hospital; 16, George street, Hanover square, W. *Vice-Pres.* 1862-63.

1872 Fernie, Henry Mortlock, Park green, Macclesfield, Cheshire.

1861 Fetherston, Gerald H., M.D.; Hon. Physician to the Melbourne Lying-in Hospital, Prahran, Melbourne, Victoria. *Hon. Loc. Sec.*

1872 Field, Albert Frederick, Milestone house, Blackwater, Hants.

1873 Finegan, James Herbert, M.D., 72, Rodney street, Liverpool.

1870 Fisher, John Moore, M.D., 2, Balmoral terrace, Anlaby road, Hull.

1873 Fitch, Simon, M.A., M.D., Portland, Maine, U.S.

1874 Fitzrayne, William Allen, 134, Tooley street, S.E.

1868 Fletcher, Edward, Lygon street, Carlton, Melbourne, Victoria.

1865 Fowler, James, F.S.A., Hon. Surgeon to the Clayton Hospital and Wakefield General Dispensary; 13, South Parade, Wakefield. *Council*, 1872-4. *Hon. Loc. Sec.*

1866 Fox, Cornelius Benjamin, M.D., Medical Officer of Health, Maldon Union Sanitary District, Chelmsford, Essex.

1872 Fox, Edward Charlton, M.D., Bloomsbury, Birmingham.

1862 Frain, Joseph, M.D., Hon. Surgeon to the South Shields Dispensary; Frederick street, South Shields.

1861 Frankland, Thomas Thrush, Surgeon to the Ripon Dispensary, North House, Ripon, Yorkshire.

1875 Fraser, Angus, M.D., 232, Union street, Aberdeen.

1874 Fraser, Robert Maclean, L.R.C.P. Ed., 7, North terrace, Northgate, Darlington.

1867 Freeman, Henry W., 24, Circus, Bath.

1867 Fryer, Charles, L.K.Q.C.P. Ireland; Richmond place, Higher Openshaw, Manchester.

Elected

1867 Fuller, Charles C., 33, Albany street, Regent's park, N.W.

1874 Galabin, Alfred Lewis, M.A., M.D., Assistant-Physician to the Hospital for Sick Children; Assistant Obstetric Physician to Guy's Hospital; 14, St. Thomas's street, Southwark, S.E.

1863 Galton, John H., M.D., Three Oak villa, Thicket road, Anerley, S.E. *Council*, 1874-5.

1872 Gardner, W., M.A., M.D., 525, St. Joseph street, Montreal.

1863 Garman, Henry Vincent, Kent House, Bow road, E.

1873 Garton, William.

1859 Gaskoin, George, 7, Westbourne park, W. *Council*, 1870-72.

1869 Geikie, Walter B., M.D., F.R.C.S. Ed., Professor of the Principles and Practice of Medicine and of Clinical Medicine in the University of Trinity College, Toronto, Ontario, Canada.

1859 Gervis, Henry, M.D., F.R.C.P., Obstetric Physician to, and Lecturer upon Obstetric Medicine at, St. Thomas's Hospital; Physician to the Royal Maternity Charity; 13, St. Thomas's street, Southwark, S.E. *Council*, 1864-66. *Hon. Sec.* 1867-70. *Vice-Pres.* 1871-3.

1866 Gervis, Frederick Heudebourck, 1, Fellowes road, Hampstead, N.W.

1874 Gibson, James Edward, Bath road, West Cowes, Isle of Wight.

1866 Giddings, William Kitto, L.R.C.P. Ed., Shaftesbury House, Calverley, near Leeds, Yorkshire.

1860 Gill, Samuel Lawrence, L.R.C.P. Ed., 4, Campbell terrace, Bow road, E.

1869 Gill, William, 43, Woburn place, Russell square, W.C.

1867 Gittins, John, L.R.C.P. Ed., St. Olave's Union, Parish street, Southwark, 134, Tooley street, S.E.

1871 Goddard, Eugene, L.R.C.P. Lond., 27, Pentonville road, N.

1869 Godden, Joseph, L.K.Q.C.P. Ireland; 47, Gildringe road, Eastbourne.

Elected

1871 Godson, Clement, M.D. and C.M., Physician to the Samaritan Free Hospital; 8, Upper Brook street, Grosvenor square, W.

1868 Godwin, Ashton, M.D., 28, Brompton crescent, Brompton, S.W.

1873 Goldsmith, John, M.D., Highworth House, Liverpool gardens, Worthing, Sussex.

1873 Goodchild, Nathaniel, L.R.C.P. Ed., 9, Highgate road, N.W.

1872 Gornall, John Hankinson, Surgeon to the Warrington Dispensary; Beech House, Winwick street, Warrington.

1869 Goss, Tregenna Biddulph, 31, The Paragon, Bath.

1873 Gray, Robert, L.K.Q.C.P.I., Russell street, Armagh, Ireland.

1874 Greene, William Thomas, M.A., L.K.Q.C.P.I., 218, Old Kent road, S.E.

1863 Griffith, G. de Gorrequer, Physician to the Hospital for Women and Children, Pimlico; Physician-Accoucheur to St. Saviour's Maternity; 9, Lupus street, St. George's square, S.W.

1869 Griffith, John T., M.D., Talfourd House, Camberwell.

1859 Griffith, Thomas Taylor, F.R.C.S., Consulting Surgeon to the Wrexham Infirmary; Wrexham, Denbighshire. *Council*, 1870-72.

1870 Grigg, William Chapman, M.D., Physician to the In-patients, Queen Charlotte's Lying-in Hospital; Assistant Obstetric Physician to the Westminster Hospital; Assistant-Physician to the Victoria Hospital for Children; 6, Curzon street, Mayfair. *Council*, 1875.

O.F. Grimsdale, Thos. F., L.R.C.P. Ed., Consulting Surgeon to the Lying-in Hospital, and late Lecturer on Diseases of Children, &c., at the Royal Infirmary School of Medicine; 29, Rodney street, Liverpool. *Council*, 1861-62. *Vice-Pres.* 1875.

1865 Gwyn, George F., Westcroft House, Hammersmith, W.

Elected

1867 HADAWAY, JAMES, L.R.C.P. Ed., 47B, Welbeck street, Cavendish square, W.

O.F. HALL, ALFRED, M.D., Senior Physician to the Brighton Dispensary; 30, Old Steyne, Brighton. *Council*, 1864-65. *Vice-Pres.* 1866-68. *Hon. Loc. Sec.*

1859 HALL, FREDERICK, 1, Jermyn street, St. James's, S.W.

1867 HALL, JOHN HENRY WYNNE, L.R.C.P. Ed., 118, Wandsworth road, S.W.

1862 HALL, WILLIAM, Lecturer on Physiology and Diseases of Women and Children, Leeds School of Medicine; Hillary place, Leeds. *Hon. Loc. Sec.*

1871 HALLOWES, FREDERICK B., Redhill, Reigate, Surrey.

1874 HANNAN, FRANCIS JOHN, M.B., Knaphill, Woking, Surrey.

1860 HARDEY, KEY, Surgeon to the West City Dispensary; 4, Wardrobe place, Doctors' Commons, E.C.

1869 HARDINGE, HENRY, M.D., Physician to the Great Northern Hospital; 18, Grafton street, Bond street, W.

1872 HARDYNG, WILLIAM, F.R.C.S., 4, Percy street, Bedford square, W.C.

O.F. HARPER, PHILIP H., F.R.C.S., 30, Cambridge street, Hyde park, W.

O.F. HARRINSON, ISAAC, F.R.C.S., Castle street, Reading, Berks. *Council*, 1862-65. *Hon. Loc. Sec.*

1862 HARRIS, CHARLES, M.D., Northiam, Ashford, Kent.

1871 HARRIS, CHARLES JAMES, 11, Kilburn Priory, N.W.

1872 HARRIS, HENRY, M.D., F.R.C.S., Trengweath place, Redruth, Cornwall.

1867 HARRIS, WILLIAM H., M.D., Professor of Midwifery in the Madras Medical College, and Superintendent of the Lying-in Hospital, Madras [agent: Mr. H. K. Lewis, Gower street].

1861 HARRIS, WILLIAM JOHN, 13, Marine Parade, Worthing.

Elected

1865 HARVEY, ROBERT, M.D., Civil Surgeon of Bhurtpore, near Agra, India [*vid* Bombay]. [Per Alex. Harvey, M.D., 228, Union street, Aberdeen.]

1873 HATHERLY, HENRY REGINALD, L.R.C.P. Ed., Wellington street, Park side, Nottingham.

1868 HAY, THOMAS BELL, L.R.C.P. Ed.; 43, Caledonian road, N.

1865 HAYES, HAWKESLEY ROCHE, Basingstoke, Hants.

1873 HAYES, THOMAS CRAWFORD, M.B., Assistant Obstetric Physician to King's College Hospital; 60, Wimpole street, Cavendish square, W.

1867 HEMBROUGH, JOHN WILLIAM, Ivy cottage, Waltham, Grimsby.

1870 HENDERSON, ALEXANDER, 2, Meadow Bank place, Rose vale, Partick, Glasgow.

1860 HESS, AUGUSTUS, M.D., Physician to the Jews' Hospital, Norwood; 14, Artillery place, Finsbury square, E.C.

O.F. HEWITT, GRAILY, M.D., F.R.C.P., Professor of Midwifery in University College, London, and Obstetric Physician to University College Hospital; 36, Berkeley square, W. *Hon. Sec.* 1859-64. *Treas.* 1865-66. *Vice-Pres.* 1867-68. *Pres.* 1869-70. *Council*, 1871-75.

1862 HEWITT, TOM SMITH, M.D., Ivy Cottage, Winkfield, Windsor, Berks.

1867 HICKINBOTHAM, JAMES, L.R.C.P. Ed., 10, Park road, Nechells, Birmingham.

1860 HICKS, JOHN BRAXTON, M.D., F.R.C.P., F.R.S., Physician-Accoucheur to, and Lecturer on Midwifery and the Diseases of Women and Children at, Guy's Hospital; Physician to the Royal Maternity Charity; 24, George street, Hanover square. *Council*, 1861-2, 1869, 1873-75. *Hon. Sec.* 1863-65. *Vice-Pres.* 1866-68. *Treas.* 1870. *Pres.* 1871-2.

1860 HIGGS, THOMAS FREDERIC, L.R.C.P. Ed., 194, High street, Dudley, Worcestershire.

1872 HILLIARD, ROBERT HANCY, M.D., 5, Belgrave terrace, Upper Holloway, N.

Elected

1868 Hime, Thomas Whiteside, M.B., 217, Glossop road, Sheffield.

1865 Hodder, Edward M., M.D., F.R.C.S, Professor of Obstetrics, &c., Trinity College, Toronto; Consulting Surgeon, Toronto General Hospital; and Senior Physician-Accoucheur to the Burnside Lying-in Hospital; Toronto, Canada West. *Hon. Loc. Sec.*

O.F. Hodges, Richard, M.D., F.R.C.S., 16, Orchard street, Portman square, W.

1864 Hoffmeister, William Carter, M.D., Surgeon to the Queen in the Isle of Wight; Clifton House, Cowes, Isle of Wight.

1871 Hogg, Francis Roberts, M.D., India.

1874 Hoggan, George, M.B., 13, Granville Place, Portman square, W.

1859 Holman, Constantine, M.D., Barons, Reigate, Surrey. *Council*, 1867-69. *Vice-Pres.* 1870-71.

1860 Holman, Henry Martin, M.D., Hurstpierpoint, Sussex.

1864 Hood, Wharton Peter, M.D., 65, Upper Berkeley street, Portman square, W.

1872 Hope, William, M.D., Physician to Queen Charlotte's Lying-in Hospital, Obstetric Assistant to St. Bartholomew's Hospital; 5, Bolton row, Mayfair, W.

1874 Hopkins, Alfred Boyd, 180, Shoreditch, E.

1861 Horton, George Edward, Castle street, Dudley, Worcestershire.

1864 Houghton, Henry George, L.K.Q.C.P. Ireland; 6, Mount street, Grosvenor square, W.

1859 Hutchinson, Jonathan, F.R.C.S., Surgeon to the London Hospital; 15, Cavendish square, W. *Council*, 1869-71.

1870 Huthwaite, Charles, L.R.C.P. Ed., Stratford square, Nottingham.

1861 Hutton, Charles, M.D., Physician to the General Lying-in Hospital; 26, Lowndes street, Belgrave square, S.W.

1859 Ilott, James William, Bromley, Kent.

Elected

1864 Jackson, Edward, M.B., Surgeon to the Sheffield Hospital for Women; Fern Bank, Glossop road, Sheffield. *Hon. Loc. Sec.*

1864 Jackson, Robert, M.D., 53, Notting hill square, W.

1873 Jakins, William Vosper, L.R.C.P. Ed., Sturt street, Ballarat, Victoria. [Per Isaac N. Jakins, Esq., 32, Osnaburgh street].

1872 Jalland, Robert, Horncastle, Lincolnshire.

1872 James, Edwin Matthews, Surgeon to the Melbourne Hospital, Victoria; 169, Collins street east, Melbourne.

1862 Jay, Frederick Fitzherbert, 12, St. Nicholas Cliff, Scarboro', Yorkshire.

1863 Jenkins, Robert W., Silver street, Axminster, Devonshire.

1859 Jennings, Joseph C. S., Abbey House, Malmesbury, Wilts.

1860 Jepson, Henry, F.R.C.S., Surgeon to the Kingston Dispensary; Hampton, Middlesex, S.W.

1861 Jones, Edward, M.D., 48, Sydenham Park, Kent.

1868 Jones, Evan, Ty-Mawr, Aberdare, Glamorganshire.

1859 Jones, George, 12, New Hall street, Birmingham.

1868 Jones, John, 60, King street, Regent street, W.

1874 Jones, John Thomas, Brookside, Llanfyllin, Montgomeryshire.

1873 Jones, Philip W., Baker street, Enfield, Essex.

1873 Jones, T. Eyton, Surgeon to the Denbigh Infirmary; The Priory, Wrexham.

1870 Jones, William, Oak villa, Glynneath, Neath, Glamorganshire.

1868 Jordan, William Ross, Surgeon to the Birmingham Hospital for Women; Manor House, Moseley, near Birmingham.

O.F. Keele, George Thomas, 81, St. Paul's road, Highbury, N.

1874 Kempster, William Henry, L.R.C.P. Ed., Oak House, Bridge Road, Battersea.

Elected

1872 KENNEDY, JOHN EDWARD, M.B., Lecturer on Medical Jurisprudence, Trinity College, Toronto; 242, Richmond street, West Toronto, Canada.

1865* KERNOT, GEORGE CHARLES, M.D., 5, Elphinstone road, Hastings, Sussex.

1872 KERR, NORMAN S., M.D., F.C.S., 42, Grove road, Regent's park, N.W.

O.F. KJALLMARK, HENRY WALTER, 66, Prince's square, Westbourne grove, W.

1869 KINGSFORD, C. DUDLEY, M.D., Upper Clapton, N.E.

1860 KINGSFORD, EDWARD, F.R.C.S., Surgeon to the Sunbury Dispensary; Sunbury, Middlesex.

1862 KIRKPATRICK, JOHN RUTHERFORD, M.B. Dubl., Examiner in Midwifery, Royal College of Surgeons, Ireland; 4, Upper Merrion street, Dublin. *Council*, 1872-4.

1872* KISCH, ALBERT, 2, Circus place, Finsbury, E.C.

1867 KNAGGS, HENRY GUARD, M.D., 72, Kentish Town road, N.W.

1874 KOCH, EDWIN L., M.D., Lecturer on Midwifery in the Ceylon Medical School, Columbo, Ceylon.

1872 KONRÁD, MARK, M.D., The Vienna Hospital, Vienna, Austria; and Gross-Wardein, Hungary.

1867 LANGFORD, CHARLES P., 187, Goswell road, E.C.

O.F. LANGMORE, JOHN CHARLES, M.B., F.R.C.S., 20, Oxford terrace, Hyde park, W. *Council*, 1861-64. *Vice-Pres.* 1869-71.

1866 LANGSTON, THOMAS, L.R.C.P. Ed., 29, Broadway, Westminster, S.W.

1862 LANPHIER, RICHARD, M.B. Dubl., Alford, Lincolnshire.

1872 LATTEY, JAMES, 26, Upper Phillimore place, Kensington, W.

1873 LAWTON, HERBERT A., The Royal Infirmary, Liverpool.

1867 LEAF, WALTER, Surgeon to the St. Marylebone General Dispensary; 14, Furnival's Inn, Holborn, E.C.

1859 LEECH, EDWARD, Pallant, Chichester, Sussex.

Elected

1860 Leishman, William, M.D., Physician to the University Lying-in Hospital, Regius Professor of Midwifery in the University of Glasgow; 156, Bath street, Glasgow. *Council*, 1866-68. *Vice-Pres.* 1869-70.

1872 Leonard, Crosby, Surgeon to the Bristol Royal Infirmary; Rockleigh House, White Ladies road, Clifton, Bristol.

1868 Leslie, William Burnup, M.D., Stonehaven, Kincardineshire.

1874 Lewis, Charles Francis, L.R.C.P. Ed., Henfield, Sussex.

1874 Lewis, Henry Harman Dendy, 120, Drummond street, Euston square, N.W.

1873 Lindsay, W. B., M.D., Strathroy, Ontario, Canada.

1874 Lithgow, Robert Alexander Douglas, L.R.C.P. Ed., Henfield, Sussex.

1868 Llewellyn, Evan, L.R.C.P. Ed., 9, Mount place, London Hospital, E.

1872* Lock, John Griffith, M.A., Lansdowne House, Tenby.

O.F. Locock, Sir Chas., Bart., M.D., F.R.C.P., 26, Hertford street, Mayfair, W. *Honorary President.*

1859 Lombe, Thomas Robert, M.D., Bemerton, Torquay.

1870 Long, Mark, M.D., 185, Amhurst road, Hackney, N.E.

1874 Longrigg, Dean, Dulwich road, Penge, S.E.

1874 Louttit, James, M.D., Trafalgar road, Greenwich, S.E.

1866 Lovegrove, Charles, M.D., Paddock House, Hythe, Kent.

1872 Lovegrove, James F., Ightham, Sevenoaks, Kent.

1862 Lowe, George, F.R.C.S., Burton-on-Trent, Staffordshire.

1869 Lowndes, Frederick Walter, 62, Mount Pleasant, Liverpool. *Hon. Loc. Sec.*

1866 Lucey, William Cubitt, M.D., Norfolk villas, Junction road, Upper Holloway, N.

1873 Lush, William John Henry, L.R.C.P.Ed., Fyfield House, Andover.

1869 Lydall, Wykeham H., L.R.C.P. Ed., 19, Mecklenburgh square, W.C.

Elected

1868 Lynch, J. Roche, 41, Chepstow villas, Westbourne grove.

1871 McBeath, William, M.D., Witham, Alford, Lincolnshire.

1871 McCallum, Duncan Campbell, M.D., Professor of Midwifery and Diseases of Women and Children, McGill University; Physician to the University Lying-in Hospital; and Physician to the Montreal General Hospital; Montreal, Canada.

1874 McCallum, John Henry, M.B. Toronto, Resident Physician at the Toronto General Hospital, Canada.

1871 M'Conkey, Thomas Clarkson, M.D., McGill Univ., M.R.C.S.E; Barrie, Ontario, Canada.

1873 Macdonald, John Alexander, M.D., Woburn, Beds.

O.F. Mackinder, Draper, M.D., Consulting-Surgeon to the Gainsborough Dispensary; Gainsborough, Lincolnshire. *Council*, 1871-3.

1872 McMonagle, Joseph, M.D., New Brunswick, Dominion of Canada.

1872 MacMordie, William Kirkpatrick, M.D., 1 College square east, Belfast.

1861 McVeagh, Dennis, L.K.Q.C.P. Ireland, 33, Bishop street, Coventry, Warwickshire.

1866 Maddever, John Coombe, M.D., 19, Battery place, Rothesay.

1859 Madge, Henry M., M.D., 4, Upper Wimpole street, W. *Council*, 1863-65. *Vice-Pres.* 1872-4.

1871 Malins, Edward, M.D., Hon. Medical Officer to the Birmingham Lying-in Charity; 8, Old Square, Birmingham.

1871 Manby, Alan Reeve, East Rudham, Brandon, Norfolk.

1868 March, Henry Colley, M.D., 2, West street, Rochdale.

1860 Marley, Henry Frederick, Padstow, Cornwall.

1859 Marley, Richard, 100, Trafalgar road, Old Kent road, S.E.

1869 Marriott, Osborne Delane, M.B., C.M., Sevenoaks, Kent.

Elected

1862 Marriott, Robert Buchanan, Swaffham, Norfolk.

O.F. Marshall, John Brake, Nightingale road downs, Clapton, N.E.

1871 Martin, Edward, Senior Surgeon to the Weston-super-Mare Hospital; Victoria House, Weston-super-Mare.

1873 Martin, Henry Charrington, M.B., C.M., 11, Radnor place, Hyde park, W.

1864 Martin, Lawrence J., M.D., Physician to the Melbourne Lying-in Hospital; 126, Collins street east, Melbourne, Victoria.

1866 Mattei, Antoine, M.D., Professor of Midwifery, Rue Thérèse 4, Paris.

1861 Matthews, John, M.D., 4, Mylne street, Myddelton square, E.C.

1867 May, Henry, L.R.C.P. Lond., Fairfield House, Lichfield road, Aston, Birmingham.

O.F. Meadows, Alfred, M.D., Physician-Accoucheur to, and Lecturer on Midwifery at, St. Mary's Hospital; 27, George street, Hanover square, W. *Council*, 1862-64. *Hon. Sec.* 1865-66. *Hon. Lib.* 1865. *Treas.* 1867-69. *Vice-Pres.* 1874-5.

1871 Miller, Hugh, M.D., Assistant-Physician to the Maternity Hospital, Glasgow; 3, Crescent place, Sauchiehall street, Glasgow.

1871 Miller, John Faure, M.D., 28, Rue de Matignon, Faubourg St. Honoré, Paris. *Hon. Loc. Sec.*

1869 Milward, James, 27, Charles Street, Cardiff.

1869 Minns, Pembroke R. J. B., M.D., Thetford, Norfolk.

O.F. Mitchell, Joseph Thomas, F.R.C.S. [8, Percy place], 176, Clapham road, S.W. *Council*, 1863-67.

1867 Mitchell, Robert Nathal, M.D., 1, Amersham park villas, New Cross, Kent.

1873 Monckton, Marshall, L.F.P.S. Glasg., Hurstpierpoint, Sussex.

Elected

1868 Moodelly, P. S. Mootoosawmy, M.D., Native Surgeon, Uncovenanted Service, Madras, Manargoody, Tanjore.

1871 Moodelly, Chittathore Banloo, Graduate in Medicine and Surgery of the Madras Medical College; Officiating Gillah Surgeon, of Cochin; Trichinopoly.

1873 Moon, Robert Henry, F.R.C.S., Fern Lodge, Lower Norwood.

1869 Moore, Joseph, M.D., Counser villa, Balham, S.W.

1859 Moorhead, John, M.D., Surgeon to the Weymouth Infirmary and Dispensary; Weymouth, Dorset.

1863 Morgan, Edward, 15, Park street, Llanelly, Caermarthenshire.

1869 Morgan, W. H., Surgeon 23rd Regiment, Tinilon, Travancore.

1871 Morrison, John R., L.R.C.P. Ed., 57, Cannon street road, E.

O.F. Murray, Gustavus Charles P., M.D., Obstetric Physician to the Great Northern Hospital; 66, Great Cumberland place, Hyde park, W. *Council*, 1864-65. *Hon. Sec.* 1866-69. *Vice-Pres.* 1870-72. *Treas.* 1873-75.

O.F. Musgrave, Johnson Thomas, L.R.C.P. Ed., Irlam villa, 39, Finchley road, N.W. *Council*, 1859-60.

1859 Napper, Albert, Broad Oak, Cranleigh, Guildford, Surrey. *Council*, 1866-68.

1863 Nason, John James, M.B. Lond., 11, Bridge street, Stratford-on-Avon.

1859 Nason, Richard Bird, Nuneaton, Warwickshire.

1859 Neal, James, M.D., late Hon. Surgeon to the Lying-in Hospital, Birmingham; Barcelona House, Sandown, Isle of Wight.

1866 Neild, James Edward, M.D., Lecturer on Forensic Medicine, Melbourne University; 166, Collins street east, Melbourne.

Elected

1859 Newman, William, M.D., Surgeon to the Stamford and Rutland Infirmary; Barn Hill House, Stamford, Northamptonshire. *Council*, 1873-75.

1872 Niblett, Francis D., L.R.C.P. Ed., The Grove, Hackney, N.

1868 Nicholls, James, M.D., Duke street, Chelmsford, Essex.

1861 Nichols, George W., Augusta House, Rotherhithe, S.E.

1873 Nicholson, Arthur, London road, Newark-on-Trent, Notts.

1868 Oates, Parkinson, M.D., 164, Cambridge street, Eccleston square, S.W.

O.F. Oldham, Henry, M.D., F.R.C.P., Consulting Obstetric Physician to Guy's Hospital; 4, Cavendish place, Cavendish square, W. *Vice-Pres.* 1859. *Council*, 1860, 1865-66, 1868-75. *Treas.* 1861-62. *Pres.* 1863-64.

1859 Oldham, James, F.R.C.S., Consulting-Surgeon to the Brighton Lying-in Institution; 53, Norfolk square, Brighton. *Council*, 1866-68.

1869 Ord, George Rice, Streatham hill, Surrey.

1863 Oswald, James Waddell Jeffries, L.R.C.P. Ed., 245, Kennington road, S.E.

1875 Owen, William, Victoria, Ebbw vale, Monmouthshire.

1869 Oxley, Martin G. B., L.K.Q.C.P.I., 80, Rodney street, Liverpool.

1859 Palfrey, James, M.D., Obstetric Physician to, and Lecturer on Diseases of Women at, the London Hospital; Obstetric Physician to the General Lying-in Hospital, York road; 29, Brook street, Grosvenor square.

1873 Parker, Robert William, Hospital for Sick Children, Great Ormond street.

1873 Parks, Luther, A.M., M.D., Boston, United States. [Agents: Messrs. McCalmont Brothers & Co., Bankers, 15, Philpot lane, E.C.]

Elected

1867 PARKS, JOHN, The Wylde, Bury, Lancashire.

1872 PARR, GEORGE, 18, Upper Phillimore place, Kensington, W.

1874 PATERSON, ALEXANDER, M.D., Bahia, Brazil [*per* Mr. Alfred Good, New Poultry Chambers, 7, Poultry, London.]

1865* PATERSON, JAMES, M.D., Hayburn Bank, Partick, Glasgow.

1874 PAYNE, WILLIAM S. HELE, 87, Queen's Road, Peckham, S.E.

1864 PEARSON, DAVID RITCHIE, M.D., 23, Upper Phillimore place, Kensington, W.

1871 PEDLER, GEORGE HENRY, 6, Trevor terrace, Rutland gate, S.W.

O.F. PEIRCE, RICHARD KING, Surgeon to the Notting hill and Shepherd's Bush Dispensary, 16, Norland place, Notting hill, W.

1873 PEREZ, DIEGO, M.D., Montevideo, South America [*per* A. K. Mackinnon, Esq., care of Messrs. John Clinch & Sons, 9, Austin Friars, E.C.]

1871 PERRIGO, JAMES, M.D., 591, St. Catherine street, Montreal, Canada.

1871 PHILPS, PHILIP GEORGE, 4, Queen's road, Peckham, S.E.

1874 PIGG, THOMAS, M.D., Physician to the Manchester Southern Hospital for Women and Children; 75, Piccadilly, Manchester.

1866 PILCHER, WILLIAM JOHN, 43, High street, Boston, Lincolnshire.

1864 PLAYFAIR, W. S., M.D., F.R.C.P., Professor of Obstetric Medicine in King's College, and Obstetric Physician to King's College Hospital; 31, George street, Hanover Square, W. *Council*, 1867. *Hon. Librarian*, 1868-9. *Hon. Sec.* 1870-72. *Vice-Pres.*, 1873-5.

O.F.* POLLARD, WILLIAM, Surgeon to the Torbay Hospital; Southlands, Torquay, Devon.

Elected

1864 Potter, John Baptiste, M.D., Obstetric Physician to the Westminster Hospital; 20, George street, Hanover square, W. *Council*, 1872-5.

1859 Pound, George, Odiham, Hants.

1863 Powell, Josiah T., M.D., 347, City road, E.C.

1864 Price, William Nicholson, Lecturer on Midwifery at the Leeds School of Medicine; 7, East parade, Leeds.

1863 Price, William Preston, M.D., Surgeon to the Metropolitan Infirmary for Scrofulous Children, Margate; 1, Ethelbert Crescent, Margate.

O.F. Priestley, William O., M.D., F.R.C.P., Consulting Obstetric Physician to King's College Hospital; and Consulting Physician-Accoucheur to the St. Marylebone Infirmary; 17, Hertford street, Mayfair, W. *Council*, 1859-61, 1865-66. *Vice-Pres.* 1867-69. *Pres.* 1875.

O.F. Radford, Thomas, M.D., Consulting Physician to St. Mary's Hospital, Manchester; Moor field, Higher Broughton, Manchester. *Vice-Pres.* 1859.

1859 Ramsay, John Allen, L.R.C.P. Ed., Great Shelford, Cambridge.

O.F. Randall, John, M.D., Lecturer on Medical Jurisprudence, St. Mary's Hospital Medical School; Medical Officer, St. Marylebone Infirmary; 35, Nottingham place, W.

1872 Rankin, William Baily, Surgeon to Prince Alfred Hospital; High street, St. Kilda, Melbourne.

1861 Rasch, Adolphus A. F., M.D., Physician for Diseases of Women to the German Hospital; Physician to the Training Hospital, Tottenham; 7, South street, Finsbury square, E.C. *Council*, 1871-3.

1870 Ray, Edward Reynolds, Dulwich.

1860* Rayner, John, M.D., Swaledale House, Quadrant road north, Highbury New Park, N.

Elected

O.F. Scott, John, F.R.C.S., 49, Harley street, Cavendish square, W. *Council*, 1868-70. *Vice-Pres.* 1871-3.

1870 Scott, John, M.D., New street, Sandwich.

1873 Sell, Edward H. M., M.A., M.D., New York City, U.S.

1863 Sequeira, Henry Little, 1, Jewry street, Aldgate, E.C.

1866 Sequeira, James Scott, 34, Leman street, Goodman's fields, E.

1860 Sewell, Charles Brodie, M.D., 76, Guilford street, Russell square, W.C., and 13, Fenchurch street, E.C.

1870 Seydewitz, Baron Paul von, M.D., late Senior Physician to the East London Hospital for Sick Children, and Dispensary for Women.

1873 Seymour, Francis, Odiham, Hants.

1872 Shapland, John Dee, Thornton Heath, Croydon.

1862 Sharman, Malim, Surgeon to the Birmingham Free Hospital for Sick Children; 18, New Hall street, Birmingham.

O.F. Sharpin, Henry Wilson, F.R.C.S., Surgeon to the Bedford General Infirmary, Bedford. *Council*, 1871-3.

1860 Shaw, George, Portland House, Battersea, S.W.

1869 Shaw, Henry Sissmore, 88, Upgate, Louth, Lincolnshire.

O.F. Shearman, Edward James, M.D., F.R.C.S., F.R.S. Ed., Consulting Physician to the Rotherham Hospital; Moorgate, Rotherham, Yorkshire.

1859 Sheehy, William Henry, L.R.C.P. Ed., 4, Claremont square, Pentonville, N.

1867 Shepherd, Frederick, L.R.C.P. Ed., 33, King Henry's road, Primrose hill, N.W.

1859 Shipton, William Parker, Consulting Surgeon to the Devonshire Hospital; Buxton, Derbyshire.

Elected

1861 SHORTT, JOHN, M.D., Surgeon H.M. Madras Army, and Superintendent-General of Vaccination, Madras Presidency. *Hon. Loc. Sec.* [Agents: Messrs. Baring, Brothers, 8, Bishopsgate within, E.C.]

1874 SIMON, GUSTAV, M.D., Professor of Surgery in the University of Heidelberg.

1874 SIMPSON, GEORGE ALEX., M.D., Hampstead lane, Highgate, N.

1874 SINCLAIR, ALEXANDER DOULL, M.D., Physician to the Boston City Hospital; 35, Newbury street, Boston, Massachusetts.

1874 SKINNER, STEPHEN, M.B., Edgecliffe, Clevedon, Somerset.

1860 SKINNER, THOMAS, M.D., Obstetric Physician to the Lying-in Hospital; Dunedin House, 64, Upper Parliament street, Liverpool. *Council*, 1865-66.

1874 SLAYTER, W. B., M.D., Halifax, Nova Scotia.

1859 SLEEMAN, PHILIP ROWLING, F.R.C.S., Montrose House, Queen's road, Clifton.

1861 SLOMAN, SAMUEL GEORGE, Farnham, Surrey.

1861 SLYMAN, WILLIAM DANIEL, 26, Caversham road, Kentish Town, N.W.

1860 SMART, THOMAS TOVEY, L.R.C.P. Ed., South Villa, Bedminster, Bristol.

1859 SMILES, WILLIAM, M.D., Surgeon to the House of Correction, Cold Bath Fields; 44, Bedford square, W.C.

1867 SMITH, HEYWOOD, M.D., Physician to the Hospital for Women, Soho square, and Physician to the British Lying-in Hospital; 2, Portugal street, Grosvenor square, W. *Council*, 1872-5.

1873 SMITH, JOSEPH, 43, David place, St. Helier's, Jersey.

O.F. SMITH, PROTHEROE, M.D., Physician to the Hospital for Women, Soho square; 42, Park street, Grosvenor square, W.

Elected

1859 SMITH, WILLIAM JOHNSON, M.D., Consulting Physician to the Weymouth Infirmary and Dispensary; Greenhill, Weymouth, Dorset. *Council*, 1869-71.

1866 SOPER, WILLIAM, Medical Officer, Jews' Hospital, Norwood 4, Clapham rise [283, Clapham road], S.W.

1869 SPAULL, BARNARD, F.R.C.S., Essex House, Vale place, Hammersmith, W.

1868 SPAULL, BARNARD E., 2, Vale place, Hammersmith, W.

1872 SPENCE, JAMES BEVERIDGE, M.D., Earlswood Asylum, Red Hill, Surrey.

1859 SPENCER, GEORGE, 8, Kensington park road, W.

1862 SPRY, GEORGE FREDERICK, M.D., Assistant-Surgeon, 2nd Life Guards, Army and Navy Club, S.W.

1867 SQUAREY, CHARLES E., M.B., 13, Upper Wimpole street, W.

O.F. SQUIRE, WILLIAM, M.D., M.R.C.P., 6, Orchard street, Portman square, W. *Council*, 1866-68.

1866 STEELE, ARTHUR BROWNE, L.K.Q.C.P. Ireland, Lecturer on Midwifery, Royal Infirmary School of Medicine; 54, Rodney street, Liverpool. *Council*, 1874-5.

1873 STEELE, EDWARD HARRY, Kingston-on-Thames.

1869 STEELE, HENRY MURRAY,

1873 STEWART, JAMES, M.D., 2, Skinner street, Whitby, Yorkshire.

1859 STONE, JOSEPH, M.D., 175, Upper Brook street, Manchester.

O.F. STOWERS, NOWELL, 125, Kennington park road, Kennington, S.E.

1866 STRANGE, WILLIAM HEATH, M.D., 13, Belsize Avenue, Belsize park, N.W.

1871 STURGES, MONTAGUE J., M.D., Elmstone House, Beckenham, Kent.

1859 STUTTER, FREDERICK AUGUSTUS, M.D., Farnboro' House, Upper Sydenham, S.E.

1870 SUMMERHAYES, WILLIAM.

1862 SUTTON, FIELD FLOWERS, M.D., Balham hill, Clapham, S.W.

Elected

1859 SWAYNE, JOSEPH GRIFFITHS, M.D., Physician-Accoucheur to the Bristol General Hospital; Harewood House, 74, Pembroke road, Clifton, Bristol. *Council*, 1860-61, *Vice-Pres.* 1862-64. *Hon. Loc. Sec.*

1850 SWEETING, GEORGE BACON, M.R.C.P., King's Lynn, Norfolk.

1859 SYMONDS, FREDERICK, M.A., F.R.C.S., Surgeon to the Radcliffe Infirmary; 35, Beaumont Street, Oxford. *Council*, 1862-65. *Hon. Loc. Sec.*

1872 SZCZYGIELSKI, JOSEPH, M.D., St. Terska, No. 24, Warsaw, Russian Poland.

1871 TAIT, LAWSON, F.R.C.S. Ed. and Eng., L.R.C.P. Ed.; Surgeon to the Birmingham and Midland Hospital for Women, and to the Lying-in Charity; Consulting Surgeon to the Church Stretton Asylum for Ladies; 7, Great Charles street, Birmingham.

1866 TANNAHILL, ROBERT DUNLOP, M.D., Physician to the Lying-in Hospital; 106, Bath street, Glasgow.

1871 TANNER, JOHN, M.D., F.L.S., Physician for Diseases of Women, to the Farringdon General Dispensary, and Obstetric Physician to the Lying-in Charity, Holborn; Alfred House, Newington Causeway, S.E.

1859 TAPSON, ALFRED JOSEPH, M.B. Lond., 36, Gloucester gardens, Westbourne terrace, W. *Council*, 1862-64.

1863 TAPSON, JOSEPH ALFRED, Surgeon to the Clapham General Dispensary; 83, High street, Clapham, S.W.

1871 TAYLER, FRANCIS F., B.A. Lond., and M.B., Claremont villa, Lewisham road, S.E.

O.F. TAYLOE, EDWARD, South lodge, Clapham common, S.W.

1870 TAYLOR, ARTHUR, M.B., 248, Kennington park road, S.E. [Marton, Province of Wellington, New Zealand.]

O.F. TAYLOR, CHARLES, M.D., Pine house, Camberwell green, S.E. *Council*, 1869-71.

1859 TAYLOR, DAVID, 180, Kennington park road, S.E.

1869 TAYLOR, JOHN, Earl's Colne, Halstead, Essex.

Elected

1871 TAYLOR, JOHN W., M.D., 34, Queen street, Scarborough.

1862 TAYLOR, THOMAS, F.R.C.S., 19, Bennett's hill, Birmingham. *Council*, 1875.

1872 TEMPLE, JAMES ALGERNON, M.D., Lecturer on Midwifery, Trinity College, Toronto.

1862 THANE, GEORGE DANCER, M.D., 15, Montague street, Russell square, W.C.

1872 THOMAS, JAMES BYER, Assistant-Surgeon H.M.'s Indian Army, Madras and Zillah Surgeon, Tinnevelly.

1870 THOMPSON, JOHN ASHBURTON, 207, Caledonian road, N.

1867 THOMPSON, JOSEPH, Junr., 1, Oxford street, Nottingham.

1869 THOMPSON, D. R., M.D., Officiating Civil Surgeon, 26th Native Infantry, Trichinopoly. [Messrs. de Beaux & Co., Esplanade Dispensary, Black Town, Madras.]

1874 THOMSON, WILLIAM, M.D., Consulting Surgeon, Peterborough Infirmary, Priestgate street, Peterborough.

1867 THORBURN, JOHN, M.D., Lecturer on Midwifery, Manchester Royal School of Medicine ; 333, Brighton place, Oxford street, Manchester.

1860 THORNE, GEORGE LEWORTHY, M.D., Swanage, Dorset.

1871 THORNE, WILLIAM BEZLY, 46, Harcourt terrace, Redcliffe square, South Kensington, S.W.

1862 THORNTON, WILLIAM HENRY, M.D., Springfield terrace, Dewsbury, Yorkshire.

1867 THORNTON, WILLIAM HENRY, Surgeon to the Royal National Hospital for Scrofula ; Berkeley Lodge, Margate.

1874 TICEHURST, AUGUSTUS ROWLAND, Silchester House, Pevensey Road, St. Leonard's-on-Sea.

1873 TICEHURST, CHARLES SAGE, Bishop's Waltham, Hants.

1860 TIFFEN, ROBERT, M.D., Wigton, Cumberland.

1866 TILLEY, SAMUEL, 70, Union road, Rotherhithe, S.E.

Elected

O.F. TILT, EDWARD JOHN, M.D., Consulting Physician-Accoucheur to the Farringdon General Dispensary; 60, Grosvenor street, W. *Council*, 1867-68, 1875. *Vice-Pres.* 1869-70. *Treas.* 1871-2. *Pres.* 1873-4.

O.F. TIMES, HENRY G., 23, Manchester street, Manchester square, W.

1872 TOLOTSCHINOFF, N., M.D., Kieff, Russia [*per* M. N. Orloff, 44, Lupus street, Pimlico].

1872 TOMKINS, ARTHUR WELLESLEY, B.A., M.D., 11, Easton place, Leamington.

1869 TOMKINS, CHARLES P., L.K.Q.C.P.I., Beddington park, Croydon.

1870 TOWNE, ALEXANDER, Junr., 354, Kingsland road, N.E.

1865 TREND, HENRY GRISTOCK, L.R.C.P. Ed., 191, Southgate road, Islington, N.

1872 TRENHOLME, EDWARD HENRY, M.A., M.D., C.M., Professor of Midwifery, University of Bishop's College, Montreal, Canada.

1873 TRESTRAIL, HENRY ERNEST, F.R.C.S., L.R.C P. Ed., 6, Trinity terrace, Victoria road, Aldershot.

1872 TUCHMANN, MARO, M.D., 148, Adelaide road, Haverstock hill, N.W.

1865 TURNER, JOHN SIDNEY, Surgeon to the Anerley Dispensary, Stanton House, Thicket road, Upper Norwood, Surrey.

1861 TURNER, RICHARD, Surgeon to the Lewes Dispensary; High street, Lewes, Sussex.

1871 TURTON, FREDERIC, Ablow House, Wolverhampton.

1861 TWEED, JOHN JAMES, Junr., F.R.C.S., 14, Upper Brook street, W.

1874 UNDERHILL, THOMAS, M.D., Summerfield, West Bromwich, Staffordshire.

1872 VANDERSTRAATEN, JULIAN LOUIS, M.D., Civil Medical Service, Ceylon.

1860 VARENNE, EZEKIEL G., Kelvedon, Essex.

Elected

1874 Venn, Albert John, M.B., 30, New Cavendish street, W.

1873 Verley, Reginald L., L.R.C.P. Ed. 88, Gower street, W.C.

1864 Wahltuch, Adolphe, M.D., 280, Oxford street, Manchester.

1860 Wales, Thomas Garneys, Downham Market, Norfolk.

1869 Walker, Alfred, M.B., Physician to the East London Hospital for Sick Children; [abroad] 17, Throgmorton street, E.C.

1866 Walker, Thomas James, M.D., Surgeon to the General Infirmary, Peterborough; 18, Westgate, Peterborough. *Hon. Loc. Sec.*

1873 Walker, Thomas Osborne, Crick, near Rugby, Northamptonshire.

1870 Wallace, Frederick, District Surgeon to the Royal Maternity Charity; 243, Hackney road, N.E.

1872 Wallace, John, M.D., Assistant-Physician to the Liverpool Lying-in Hospital; 4, Canning street, Liverpool.

1872 Waller, Charles Beaumont, Sydenham, S.E.

1860 Waller, John Turpin, Flegg Burgh, Norfolk.

1867 Walters, James Hopkins, Faringdon, Berks.

1873 Walters, John, M.B., Bell street, Reigate, Surrey.

O.F. Wane, Daniel, M.D., 20, Grafton street, Bond street, W.

1860 Ward, John, Penistone, Sheffield, Yorkshire.

1859 Warden, Charles, M.D., Hon. Surgeon to the Birmingham Lying-in Hospital; 39, Temple street, Birmingham.

1874 Warn, Reuben Thomas, 37, Highgate road, N.W.

1862 Watkins, Charles Stewart, 16, King William street, Strand, W.C.

1861 Watts, George Henry, Thatcham, near Newbury, Berks.

1873 Way, John, M.D., 4, Eaton square, S.W.

1867 Webb, Fred. E., 113, Maida vale, W.

O.F. Webb, Henry Speakman, Welwyn, Herts.

Elected

1872 WEBSTER, THOMAS, Malvern House, Redland, near Bristol.

1860 WELCHMAN, CHARLES EDWARD ELLIOT, Bore street, Lichfield, Staffordshire.

1867 WELLER, GEORGE, Forest lodge, Wanstead, Essex.

1874 WELLS, HARRY, M.D., H.B.M. Vice-Consul, Gualeguaychu, Entre Rios, Argentine Confederation.

O.F. WELLS, T. SPENCER, F.R.C.S., Surgeon in Ordinary to H.M.'s Household; Surgeon to the Samaritan Free Hospital for Women and Children; 3, Upper Grosvenor street, W. *Council*, 1859. *Vice-Pres.* 1868-70.

1859 WESTMACOTT, JOHN GUISE, M.D., Medical Officer to the Paddington Provident Dispensary; 19, St. Mary's terrace, Paddington, W.

1870 WHEATCROFT, SAMUEL HANSOM, L.R.C.P. Ed., 3, Oak Villas, Gipsey road, Lower Norwood.

1860 WHEELER, DANIEL, Chelmsford, Essex.

1873 WHITE, FREDERICK BROAD, 15, Maida vale, W.

1860 WHITE, FREDERICK GEORGE, L.R.C.P. Ed., Castle House, Chepstow, Monmouthshire.

O.F. WHITEHEAD, JAMES, M.D., Physician to the Manchester Clinical Hospital; 87, Mosley street, Manchester. *Council*, 1859-61. *Vice-Pres.* 1868-69.

1864 WHITMARSH, WILLIAM MICHAEL, M.D., Surgeon to the Hounslow Lying-in Charity: Albemarle House, Hounslow, Middlesex.

1867 WILBE, RICHARD HAYDOCK, M.D., York Lodge, 21, Finchley road, St. John's Wood, N.W.

1873 WILKINS, RICHARD, Hon. Assistant Surgeon, Madras Army, Demonstrator of Anatomy in the Medical College, Madras; Madras.

1871 WILKINSON, WILLIAM HENRY WHITEWAY, L.R.C.P. Ed., 268, Caledonian Road, Islington, N.

1861 WILLIAMS, ARTHUR WYNN, M.D., Physician to the Samaritan Free Hospital; 1, Montagu square, W. *Council*, 1871.

Elected

1864 WILLIAMS, EDWARD, M.D., Holt street House, Wrexham.

1867 WILLIAMS, HENRY LLEWELLYN, M.D., 9, Leonard place, Kensington, W.

1872 WILLIAMS, JOHN, M.D., Assistant-Obstetric Physician to University College Hospital; 28, Harley street, Cavendish square, W. *Council*, 1875.

1860 WILLIAMS, ROBERT HANKINSON, L.R.C.P. Ed., Great Eccleston, near Garstang, Lancashire.

1873 WILMOT, ROBERT EARDLEY-, M.B., Ottery St. Mary, Devon.

1859 WILSON, JAMES GEORGE, M.D., Professor of Midwifery in the Andersonian University, Glasgow; Physician-Accoucheur to the Glasgow Lying-in Hospital and Dispensary; 9, Woodside crescent, Glasgow. *Council*, 1863-64. *Vice-Pres.* 1865-67.

1873 WILSON, JOHN HENRY, L.K.Q.C.P. Ireland, Kensington Lodge, Kensington, Liverpool.

1860 WILSON, ROBERT JAMES, F.R.C.P. Ed., 7, Warrior square, St. Leonard's-on-Sea, Sussex. *Hon. Loc. Sec.*

1868 WILTON, JOHN, L.R.C.P. Ed., Chalk Pit House, Sutton, Surrey.

1866 WILTSHIRE, ALFRED, M.D., Assistant-Obstetric Physician to St. Mary's Hospital, and Physician for the Diseases of Women to the West London Hospital; Physician to the British Lying-in Hospital; 57, Wimpole street, Cavendish square, W. *Council*, 1870. *Hon. Lib.* 1871-3. *Hon. Sec.* 1874-5.

1872 WISE, WILLIAM CLUNIE, M.D., Gothic villa, Burrage road, Plumstead, S.E.

1860 WISEMAN, WILLIAM WOOD, Springstone House, Ossett, near Wakefield, Yorkshire.

1872 WOOD, ROBERT ARTHUR HENRY, 9, Elizabeth street, Liverpool.

1860 WOOD, WILLIAM JAMES, Brightwaltham, Wantage, Berks.

Elected

1864 Woodman, William Bathurst, M.D., Assistant-Physician to the London Hospital; 6, Christopher street, Finsbury square, E.C.

O.F. Worship, J. Lucas, Manor House, Riverhead, Sevenoaks, Kent. *Council*, 1875.

1871 Yarrow, George Eugene, M.D., 87, Old street, E.C.

1866 Yeaman, George, M.D., 5, Windsor place, Sauchiehall street, Glasgow.

1870 Yeates, George, M.D., Grove road, Walthamstow, Essex.

1874 Young, David, M D., 13, Via dei Fossi, Florence, Italy.

1861 Young, William Butler, 10, Castle street, Reading, Berks.

1869 Yule, John S. C., Castlefield House, 78, Walmsey road, Bury, Lancashire.

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The Council have the satisfaction of announcing that with the present volume of the Society's 'Transactions' is issued a General Index of the first fifteen volumes. The Index, for the compilation and presentation of which the Society is indebted to Dr. Potter, is divided into two parts, giving (1) the names of authors; (2) the titles of subjects. It is hoped that the labour kindly bestowed by Dr. Potter will be found to materially facilitate reference to the past 'Transactions' of the Society.

The Society is not as a body responsible for the facts and opinions which are advanced in the following papers and communications read, or for those contained in the abstracts of the discussions which have occurred, at the meetings during the Session.

53, Berners Street,
Oxford Street, W.

OBSTETRICAL SOCIETY

OF

LONDON.

SESSION 1874.

ANNUAL GENERAL MEETING.

JANUARY 7TH, 1874.

EDWARD JOHN TILT, M.D., President, in the Chair.

Present—39 Fellows and 3 visitors.

Books were presented by Dr. F. C. Faye and Dr. Paolo Postempski, and the Report of the Columbia Hospital for Women, and Lying-in Asylum, Washington, by Dr. J. Harry Thompson, surgeon of the hospital.

The following gentlemen were elected Fellows of the Society: James E. Gibson, M.R.C.S. (Cowes); Thomas Rowan, L.R.C.P.Ed. (Melbourne); and Thomas Underhill, M.D. (West Bromwich).

Mr. James Charlesworth, Dr. W. H. Kempster, Dr. W. B. Robertson, and Mr. Arthur Roper were proposed for election.

Dr. AVELING exhibited a clitoris symmetrically hypertrophied which he had removed from a patient æt. 27, in the Chelsea Hospital for Women. It measured $2\frac{1}{8}$ inches in length, and the circumference of the glans was $1\frac{3}{4}$ inch. So

much irritation was caused even by the dress of the patient touching it that her life was rendered miserable.

Dr. WILTSHIRE inquired if there was any history of syphilis. He had removed the organ in a case of great hypertrophy from that disease; it weighed a pound and a quarter. The surface presented a tuberculated aspect like elephantiasis.

Dr. SAVAGE thought such cases should be called elephantiasis.

Dr. CLEVELAND exhibited a five months' fœtus that presented the peculiarity of intense congestion amounting to dark blueness of the head and neck. The mother was a multipara, with a large pelvis, and there was no evidence of pressure. There was no mark of decomposition, and she thought she had felt movement only a few hours before expulsion. On removing the scalp there was found general diffused ecchymosis on the cranial surface, but no effusion or abnormal appearance of the brain.

Dr. HEYWOOD SMITH exhibited a fœtus and double placenta presenting the following characteristics:—The fœtus was that of about three months' growth, flattened and curved laterally. The convex side had been pressed against the concave walls of the uterus, and the concavity formed by pressure from the growth of another fœtus which grew to maturity. The lower extremities flexed upon the abdomen had produced absorption of its contents. The placenta, that of an ordinary twin pregnancy, presented the following features:—One part was fully developed, the line of demarcation was plain, and the other portion, about a fifth or sixth of the whole mass, was atrophied, consolidated, and flattened, thinned out towards its free margin, and curved to accommodate it to the pressure of the living child. The mother had had thirteen previous pregnancies, of which four had been abortions. She passed the flattened fœtus at 8 a.m. one morning, and continued to be about in her room; and at 12.50 p.m. on the same day was delivered of a living male child.

ON THE NECESSITY FOR CAUTION IN THE EMPLOYMENT OF INTRA-UTERINE STEMS.

By Arthur W. Edis, M.D.,
ASSISTANT PHYSICIAN, HOSPITAL FOR WOMEN, SOHO.

The following cases are brought forward at the suggestion of Dr. Routh, the author of the paper "On the Use of Intra-uterine Pessaries in Uterine Disease," read at our previous meeting, the object being, not to advocate the entire disuse of intra-uterine stems, but rather to impress more forcibly than opportunity permitted the desirability of extreme caution before resorting to this expedient, as also to prolong the discussion upon, what after all is considered by many, a necessary and very useful method of treatment. It is not in any way intended to offer any criticism upon Dr. Routh's paper, but rather to supplement it by the record of cases where the result has not been so successful as in those under his care, and to enforce more earnestly the risk we incur.

Dr. Thomas, of New York, in his recent edition, speaking of the intra-uterine or stem pessary, says that "it has been found to cause peritonitis and death in a number of instances, and in consequence it has been almost entirely abandoned" (p. 391). "A faithful trial of the instrument for twenty years by capable practitioners in different parts of the world has not resulted in a verdict in its favour."

"Intra-uterine pessaries should be used with the greatest caution; the uterus should be prepared for tolerance of the foreign substance, and afterwards the patient should be carefully watched in order that the instrument may be removed on the first symptom of endometritis."

I could multiply the cases, but it is needless for my present object, which is more to provoke discussion than to exhaust the subject.

I may say in conclusion that the more I see of cases of flexion the less do I feel disposed to insert stems, except, as Dr. Routh so ably insisted upon, after careful preliminary treatment and supervision of the patients. Dilatation by means of the graduated bougies I find to answer the purpose in a large majority of the cases.

Case 1.—G. B—, æt. 32. Married ten years, sterile. First seen November 6th, 1873.

History.—Has been subject to dysmenorrhœa all her life. In March, 1869, being then cook in an establishment where Dr. X— was attending the lady of the house, she was seen by him at the lady's request, and there and then an intra-uterine stem inserted, no instruction or caution being given to her—simply being told that now she would be perfectly cured of all her troubles. Within a few days severe symptoms became developed, and she was obliged to keep her bed, where she remained for thirteen weeks, her sufferings at first being intense and agonizing. She was salivated, poulticed, leeched, and drugged, and at the end of thirteen weeks was considered sufficiently well to be removed to a hospital, where she remained twelve weeks.

She went home after this, but was "out of place" for two years, doing little or nothing; returning again to the hospital the following year for another twelve weeks, when iodized cotton was employed in place of leeches, and with more relief to the symptoms.

Shortly after this she took a light situation, and managed to do her work, still suffering very much at the periods, and her general health being very much deteriorated. Six months since she began to suffer more, and on November 6th, 1873, when first seen, she complained of dreadful bearing-down pain, burning pain in lower abdomen and back, inability to hold her water for more than ten minutes at a time during the day, and much inconvenience at night from frequent calls to micturate, which act is attended by severe smarting pain.

She has "dreadful pain in the left iliac region as if some-

thing were gathering." She can hardly sit or stand, and is in great misery; there is also difficulty in defæcation.

On *examination* the urethra was found to be normal. The uterus was enlarged, very tender to the touch, fixed in the pelvis by surrounding deposit, which seems to fill up nearly the entire true pelvis, and can be readily felt by conjoined manipulation. No attempt was made to pass a sound.

She still suffers severe pain in her back at the periods. The local symptoms have been somewhat relieved by belladonna pessaries.

Case 2.—E. B—, æt. 29. Married two years and a half. Supposed to have had an abortion at the sixth week two years ago, after which she had inflammation of the uterus.

When first seen in March 1873, she was suffering from cervico-endometritis, the uterus being slightly anteflexed. She was advised to come into the hospital for treatment, but there being no vacancy she presented herself at another hospital where an intra-uterine stem was inserted. Within ten days from this date she was admitted into the hospital and the stem removed.

Pelvic cellulitis set in, the uterus becoming fixed by surrounding deposit, causing much distress by pressure on the neck of the bladder. She was discharged at the end of seven and a half weeks, the uterus being still partly fixed by deposit on the right side.

Case 3.—M. A. B—, æt. 30. Married six years, sterile. When first seen in April, 1872, she complained of pain at her periods and dyspareunia. The uterus was anteflexed, and posteriorly to it a cyst, the size of an orange, was detected, probably the left ovary enlarged.

The uterine sound was passed on several occasions with apparent benefit, but as the anteflexion remained, and the patient was exceedingly anxious to have a family, she was advised to lie up and have a stem inserted; this was done on

July 4th, 1872, and she went on well for three weeks, when feverish symptoms set in, and she had a smart attack of pelvic-peritonitis, together with pelvic cellulitis, which confined her to bed for nearly two months. At the end of October the uterus was anteflexed and partially fixed in the pelvis, but when seen in May, 1873, the deposit in the pelvis had almost entirely disappeared, and her general health had much improved.

Case 4.—L. M—, æt. 23. Married three years and a half. Had one premature confinement seven months after marriage.

When first seen in March, 1872, she was suffering from dysmenorrhœa due to anteflexion and chronic metritis, the uterine sound passing with pain and difficulty upwards and forwards. The employment of the iodide of potassium internally, the occasional application of leeches, and the use of the tampon with glycerine and other remedies, afforded much relief to the symptoms, and the condition of affairs materially improved; the graduated bougies were subsequently employed, and the dysmenorrhœa ceased entirely.

The patient being very desirous of having children, and the anteflexion still remaining, the internal os was divided by means of a Civiale's urethrotome and a small silver *stem* passed on October 31st, 1872. She was seen at short intervals during the next three weeks, the pulse and temperature remaining normal.

On November 20th she wrote stating that "I am not in any pain and feel very well; there is a slight discharge."

She had been advised to keep very quiet, to remain separate from her husband, and to avoid all occasions of fatigue or excitement.

Twenty-three days after the stem had been first introduced she had a rigor. The pulse ran up to 132, the temperature to $103\frac{2}{5}^{\circ}$ F. The stem was at once removed. Perfect rest in bed enjoined, and appropriate treatment resorted to. She progressed fairly for a week, when symp-

toms of collapse suddenly set in, giving one the idea that an abscess had burst into the peritoneum, and she died on November 30th, 1872, just one month after the stem had been inserted.

No post-mortem was allowed.

Dr. SAVAGE said, if any precautions really could ensure against the evils so often following the employment of intra-uterine stems, those insisted on in Dr. Routh's paper ought to prove effective. But would the clinical history of cases so treated warrant this conclusion? Uterine tolerance was a very capricious affair; the art of bringing the uterus into a condition insuring immunity when subjected to treatment of this sort he feared had yet to be acquired. Until prolonged experience had tested Dr. Routh's position no pains should be spared to impress on the minds of those proposing to enter on this line of treatment the uncertainty of morbid uterine reactions. A patient wearing an intra-uterine stem pessary or tent should never be long out of view. Remarkable variations in regard to uterine tolerance were exhibited by cases wherein no apparently special dissimilarity could account for them. A patient of his went abroad unknown to him, returning six months afterwards with the same stem *in sitû*, but corroded, with the shield partially detached, having suffered nothing attributable to the stem in the uterus. Another, after preliminary treatment, not, perhaps, so rigorous as that prescribed by Dr. Routh, very speedily showed signs of pelvic mischief. Seven fatal cases, owing to the treatment in question, had been brought under his notice. He believed that there was no one, having had extended experience in this mode of treatment, who could not furnish many regretable instances of bad results intermediate between these extremes. Where these machines could be endured there was no denying that they afforded much comfort, but they might be well tolerated for days, weeks, nay months even, when all on a sudden signs of severe pelvic mischief might supervene. In such cases, under a mistaken impression, stems of different shapes and sizes have been substituted only to aggravate the symptoms, too often adding new and lengthened troubles to the original one. The cases mentioned in Dr. Edis's paper went far to justify these observations; one, in particular, appeared a specially lamentable instance in confirmation. Then, again, certain irremediable uterine anomalies of conformation or position or both were far from uncommon, defying stem treatment or any treatment. Many of these (unconsciously, it was to be hoped) had been subjected to stem manipulations, of course without the

least chance of success. On the whole, it might be laid down as a rule, without exception, that the employment of intra-uterine stems, no matter what might be their shape, size, or character, is always attended with risk, and, therefore, should never be resorted to without the opportunity of frequent watching. Dr. Savage inquired if Dr. Routh meant to say that he (Dr. Routh) had never produced evil effects such as he (Dr. Savage) had alluded to as consequence of the employment of intra-uterine stems of sea tangle.

Dr. Routh admitted that he had seen evil results from the use of sea tangle before he prepared such stems in disinfectants.

Mr. Scott, in corroboration of the remarks made by Dr. Savage, considered one of the dangers incidental to the use of intra-uterine stems was that in some cases they were worn with impunity for weeks, when suddenly, from some cause frequently so slight as to have escaped observation, metroperitonitis or cellulitis sets in, thereby endangering the life of the patient.

Dr. Bantock regretted that he had not heard the paper read by Dr. Routh at the last meeting, and had only heard the concluding sentences of Dr. Edis's paper; but he gathered from the remarks that had been used that Dr. Edis objected to the use of the intra-uterine stem without previous preparatory treatment. After considerable experience of the use of the stem, he agreed, to a certain extent, with the views of Dr. Edis, and would not employ the stem in a case of acute congestion of the uterus. He (Dr. Bantock) had, however, employed it in one case, of which he gave particulars. A patient, the subject of acute anteflexion, attended with severe dysmenorrhœa and considerable uterine leucorrhœa, had her cervix divided with the effect of relieving the dysmenorrhœa at her next period. Subsequently an attempt was made to introduce a stem, but the internal os being too small to admit it, division was again resorted to, and the stem at once passed. The consequence was an attack of acute metritis, which necessitated the removal of the stem. Some time after the patient came under his care with her condition much aggravated. Local depletion and internal remedies were followed by relief to the leucorrhœa; but the flexion and dysmenorrhœa were in no degree alleviated. The passing of the sound was attended with severe pain; yet he resolved, as a last resource, to try the effect of a stem pessary, and he did so with considerable apprehension. After dilatation by means of a fine tangle tent he introduced one of his stems, and had to relieve the pain by the use of morphia subcutaneously and by the mouth. The patient was kept in bed for from two to three weeks, and then allowed gradually to go about. The stem was worn for four months, and whereas, previous to the use of the stem, menstruation lasted a whole week with severe pain, while wearing this instrument

she menstruated only about four days, and without pain. Another result was the relief of chronic cystitis, which caused the patient great suffering, and she now is in very good health. He decidedly objected to the introduction of a stem immediately after division of the cervix, believing the practice to be fraught with great danger, and he had seen several cases in which severe inflammatory action had been set up by such a procedure. He was in the habit of passing his stem, in the out-patient department of the Samaritan Hospital, in some cases with complete relief to the dysmenorrhœa, in others with only partial relief; but in no case as yet with any untoward result.

Dr. Heywood Smith wished again, as he had done in the former discussion, to urge strongly the advisability of local depletion of the uterus before proceeding to the introduction of any intra-uterine stem. Then with regard to dilatation of the cervical canal, he held that it was quite easy to dilate the cervix, and with temporary benefit to the patient, by means of graduated sounds, but after a time the stretched cervix returned, like india rubber, to its abnormal condition. He considered it essential to permanent relief, that whether by incisions carried up along the whole length of the cervical canal, or by forcible dilatation by means of an uterine dilator, or by both, the lining membrane should be in some way torn through and maintained afterwards in an extended condition to prevent its closing again. In answer to a question from Dr. Savage as to whether he had seen much benefit follow the introduction of Dr. Greenhalgh's spring intra-uterine stems, he said that he had had considerable success with their use.

ANNUAL MEETING.

Dr. G. H. Carter and Dr. Clement Godson were nominated by the President to act as scrutineers of the ballot, and after nine o'clock their report was read, from which it appeared that the following list of office-bearers recommended by the Council had been adopted:

Honorary President.—Sir Charles Locock, Bart., M.D.
President.—Edward John Tilt, M.D.

Vice-Presidents. — John Clay (Birmingham); Edward Copeman, M.D. (Norwich); Henry M. Madge, M.D.; Alfred Meadows, M.D.; W. S. Playfair, M.D.; Charles H. F. Routh, M.D.

Treasurer.—Gustavus C. P. Murray, M.D.

Honorary Secretaries.—John J. Phillips, M.D.; Alfred Wiltshire, M.D.

Honorary Librarian.—James H. Aveling, M.D.

Honorary Members of Council.—Henry Oldham, M.D.; Robert Barnes, M.D.; John Hall Davis, M.D.; Graily Hewitt, M.D.; John Braxton Hicks, M.D., F.R.S.

Other Members of Council.—George Granville Bantock, M.D.; John Bassett, M.R.C.S. (Birmingham); James Watt Black, M.D.; John Meaburn Bright, M.D.; George B. Brodie, M.D.; Thomas Chambers, M.R.C.P. Ed.; William Henry Day, M.D.; James Duncan, M.B.; Arthur W. Edis, M.D.; James Ellison, M.D. (Windsor); James Fowler, M.R.C.S. (Wakefield); John H. Galton, M.D.; John Rutherford Kirkpatrick, M.B. (Dublin); William Newman, M.D. (Stamford); John Baptiste Potter, M.D.; Arthur Roberts, M.R.C.S.; Heywood Smith, M.D.; Arthur B. Steele, L.K.Q.C.P.I. (Liverpool).

Auditors' Report.

The report of the Auditors (Dr. Easton and Dr. Bloxam) of the receipts and expenditure of the Society for the year ending December 31st, 1873, was then read. The income of the Society for the year amounted (including a balance in hand from 1872 of £51 2*s.* 9*d.*) to £818 3*s.* 7*d.*, which comprised the items of—subscriptions, £607 19*s.*; composition fees, £31 10*s.*; midwifery examination fees, £11 16*s.*; sale of 'Transactions,' £74 19*s.* 2*d.*; and interest on stock, £40 16*s.* 8*d.* The expenditure was—for 'Transactions' and other printing, £289 10*s.* 1*d.*; Library and Museum,

£268 15*s.* 5*d.*; and general expenses, £120 12*s.* 8*d.*; leaving a balance in hand of £139 5*s.* 5*d.*

The adoption of the Report was moved and seconded, and carried unanimously.

The following report of the Honorary Librarian for the year 1873 was then read and adopted:

Report of the Honorary Librarian for 1873.

Mr. PRESIDENT and GENTLEMEN,—In presenting you with the report for the past year I have the satisfaction of assuring you of the continued usefulness and value of the Library and Museum.

The visitors to the Library, including foreign and other strangers who are always welcome, have increased in number, and the Fellows continue to avail themselves largely of the privilege of taking out books for home perusal. The advantages our Library affords are, therefore, in these respects evidently much appreciated. One hundred and eighteen volumes have been added during the past year.

With reference to the Museum I have to report that, at the request of Her Majesty's Commissioners for the International Exhibition, and with the sanction of the Council, some of our collection of instruments, including the original cephalotribe of Baudelocque, were exhibited at South Kensington. Others, also with the sanction of the Council, were exhibited at the Meeting of the British Medical Association, held at King's College in August last.

Several important and valuable additions have been made to the Museum and Library, chiefly by the kindness of friends. Among these must be mentioned one of our Honorary Fellows, Prof. Lazarewitch, of Charkow, who has shown the great interest he continues to take in the Society by presenting us with a number of valuable instruments and an atlas of very beautiful photographs. Mr. Tuson has

kindly given us a series of excellent wax models, illustrating uterine polypi and other diseases.

Dr. Shortt, of Madras, has kindly sent us models of two pelves, which, I regret to say, sustained some damage in transit. Last, but far from being least, I have great satisfaction in mentioning the very handsome and useful present made us by a member of our Council, my friend Dr. William Henry Day. Dr. Day kindly offered to make a donation of books to the Library, the works to be selected by myself. On my suggesting that a microscope might be very useful, Dr. Day, in the kindest manner, offered to increase the amount of his donation for that purpose; and, accordingly, we have the good fortune to possess the very handsome and perfect instrument now on the table—a present which I trust will be found to be of the utmost value, especially in the work of committees appointed to report on morbid and other specimens. It will also be acceptable to the Fellows during the usual hours.

Still another donation must be mentioned: it is that of a bust of the revered Founder of this Society, the late Dr. Tyler Smith, which has been presented to the Society by his representatives. I am sure that anything relating to this distinguished and much lamented obstetrician will be regarded with the utmost respect by the Fellows of this Society, which is so much indebted to him.

Our rooms continue to be more and more fully and usefully employed for the meetings of the various committees. The last appointed of these, the Transfusion Committees, has held several meeting during the past year.

The quarterly examinations for midwives have also been held at the Library.

I have now, Mr. President and Gentlemen, in resigning the office of Honorary Librarian, to offer you my best thanks for the courtesy and consideration invariably shown me, and in returning the honorable office to your hands I would express the hope that it has not suffered during the term of my tenure of it.

I cannot conclude without a word of praise to Mr.

Watson, M.R.C.S., our sub-librarian, who has at all times rendered me most efficient service, and whose valued help I now desire very gratefully to acknowledge.

I have the honour to be,
Mr. President and Gentlemen,
Your faithful servant,
ALFRED WILTSHIRE, M.D.

Dr. CLEVELAND wished to inquire if a volume of reference as an index to the 'Transactions' could not be issued. Others no doubt, as well as himself, had felt the want of such a guide-book to the earlier papers published by the Society.

A special vote of thanks was given to Dr. DAY for his handsome present of a microscope.

A vote of thanks was then passed to the retiring officers of the Society.

The President then delivered the Annual Address.

ANNUAL ADDRESS.

GENTLEMEN,—On the opening of a new year the President of a great Society has a threefold duty to perform: he has to pay a tribute of respect to the fellow-labourers whose labours have been stopped, to estimate the work of the past year, and to direct attention to what has to be done in the opening year. We differ greatly from other medical societies, for in addition to our scientific duties, we represent Obstetrical medicine, and we are, in fact, the only organized body, in this country, that takes a lively interest in what relates to this branch of the healing art; so I shall have to dilate, to a considerable extent, on several points of public interest.

Of some of those who died last year I have little knowledge.

John Noble Agnew, M.D., of Toronto, Ontario, died in July, 1872, soon after having joined the Society.

Charles Porter, of 55, Digbeth Street, Birmingham, M.R.C.S.E., joined the Society in 1860 and died in May, 1873.

William Dunderdale, M.D., of Warrington, Lancashire, died last May.

Benjamin Charles Prichard, of Cottenham, Cambridgeshire, was an M.D. of Aberdeen, and died last November, aged seventy-two. During his long and successful practice he attended 10,000 midwifery cases, and he contributed a paper, to the 'British Medical Journal,' "On Unusual Presentations of the Fœtus."

Edward Savage Haviland, of 466, Edgware Road, Maida Hill. He became an M.D. of Edinburgh in 1823, was some time Surgeon to the Brighton Dispensary, joined the Society in 1861, and died last February.

John Whitehead, M.D., of 7, Poole's Terrace, Seven Sisters Road, Holloway, had been Surgeon to the Islington Provident Dispensary. He has contributed to the 'Medical Times' papers on "Diphtheria," "Cholera," and "On Amputation of the Penis by the Ecraseur." He died last November.

Horace Basan, L.R.C.P.Ed., of Welbeck Street, Cavendish Square, was one of the medical officers of the Marylebone Provident Dispensary, and died last December, in the saddest possible way.

Henry Woodruffe Bailey, of Thetford, Norfolk, F.R.C.S.E., a member of several scientific societies and one of our Honorary Fellows, died last December, at the advanced age of eighty-six. He had published a collection of anatomical plates in 1810, and being a great friend of the late Dr. Rigby, he embodied the results of an unusually successful midwifery practice in an elaborate statistical report, that will be found in the first volume of our 'Transactions.'

William Harvey, of 48, Lonsdale Square, Islington, died last March. Although he had no other qualification

than the fact of his having been in practice before 1815, he was a good practitioner, a clever writer, an accomplished speaker, and was gifted with great aptitude for business. He was permanent Chairman of the Board of Guardians, and he took an active part in all the public concerns of the parish in which he was deservedly popular.

Gilbert Love, of Wimbledon, M.R.C.S.E., was another of those excellent men who are not only zealous and good practitioners, but who take pleasure in identifying themselves with all the charitable and social institutions of their neighbourhood, and when failing health obliged him to retire, his patients presented him with a testimonial and £800.

Although such men as the two last named are soon destined to be forgotten, they are really our most brilliant professional ornaments, and it is to them we owe that a love of the medical profession is deeply rooted in the hearts of the people.

I have now to sketch the life of one of that glorious band of men who rise to eminence, without being helped upwards by strength of constitution, by irresistible charms that pave the way to success, by those comfortable circumstances that foster a young career, or by influential friends that watch over it with providential care. Yes, gentlemen, our founder had none of these advantages, and still he rose to power by making the most of the talents of which I shall give proof; not in a fitful manner, but perseveringly, during the whole course of his career.

William Tyler Smith, of 31, Upper Grosvenor Street, was born, near Bristol, on the 10th of April, 1815. Delicate health caused his education to be neglected, but ambition prompted him to supply deficiencies by perseverance when once he had entered the Medical School of Bristol. He owed all his medical training to that provincial school, but went to London to try his fortune, and soon took the M.B. degree of the London University. He married early in life the sister of Mr. Yearsley, the well-known aurist, and, like so many young doctors, he supported himself by taking

pupils and by literary labour. He must have been undecided as to the direction of his work, up to 1844, for in that year he published a book on Scrofula, which gives a fair *résumé* of Lugol's views, but about 1845 he joined Dermott's School of Medicine as lecturer on Obstetrics. The first thing he wrote in the 'Lancet' was "Quacks and Quackery," and the late Mr. Wakley, a first-rate judge of men, thought highly of him, and soon set him to write biographies of living medical celebrities. The policy of thus offering sacrifice to heroes, before their death, was fairly questioned; but it well served the writer, insomuch that he made friends of many of those whom he had cleverly portrayed. Amongst others he became intimate with Marshall Hall, who advised him to apply his physiological views to the explanation of Obstetrics, and the British School of Gynæcologists has to a great extent followed Tyler Smith's example and made physiology the leading thread of Obstetrics.

When I first saw him, in 1847, he was living in Bolton Street, and was sub-editor of the 'Lancet,' succeeding to Dr. H. Bennet, and preceding Dr. Barnes in that office. In 1848 he became an M.D. of the London University; in 1849 appeared "Parturition and Principles of the Practice of Obstetrics;" and in 1850 he became a licentiate of the Royal College of Physicians, London. St. Mary's Hospital was to be opened in 1851, and its medical officers had to be appointed. Dr. H. Bennet was considered sure of being the physician-accoucheur on account of his professional standing, his residence in the neighbourhood, the substantial interest he had taken in the building, and his long connexion with the General Western Dispensary and Lying-in Charity; but a small knot of London seniors, of whom Marshall Hall was the most influential, had determined that Dr. H. Bennet should not have the appointment. To damage his position, they had already organized, in 1850, two singular discussions, one at the Royal Medical and Chirurgical Society of London, the other at the Medical Society of London; in order to demonstrate to the medical profession, that it was both useless and

immoral to use the speculum for the study or for the treatment of uterine diseases. These gentlemen canvassed so zealously for Tyler Smith, that he was elected by a considerable majority. Once a hospital physician, he fully justified the appointment, by his work on Leucorrhœa in 1855, and in 1858 by his 'Manual of Obstetrics,' which is really a second editon of the work on Parturition. Then came deserved honours: he became Midwifery Examiner at the London Uuiversity, Member of the Royal Academy of Madrid and of the Dublin Obstetrical Sociсty, Fellow of the Royal College of Physicians, London, in 1859, and, some time later, Justice of the Peace. Then at last came the long-delayed harvest, and while gathering in the golden grain, he found time to mix himself up with various commercial speculations, for which he was fitted by his aptitude for business. With Mr. Wakley he founded the New Equitable, which forced the other offices to deal more liberally with medical men, and he somewhat compromised capital by attempting to make a fashionable watering-place of the forgotten borough of Seaford, near Newhaven. In 1860 he founded this Society, but of that, more anon. As time wore on he gave us an occasional paper, but he never found time or energy sufficient to bring out a second edition of his 'Manual of Obstetrics,' which had been long out of print. He had to give up his post of Physician-Accoucheur in 1871, and soon after his health began to fail. Several sudden attacks of epistaxis greatly reduced his strength, and were accounted for by the persistence of purpura spots; albuminuria was evident for a year before he died, and on one occasion, uremia made him unconscious for several hours. These momentous warnings had no more effect on him, than had similar warnings on Tanner and on Brinton; they only made him nervous and inclined to ask a medical opinion of any stray medical man he might meet. On he worked as usual, and while staying at Richmond, last Whit Monday, he went out early in the morning, to walk by the river side, and was found sitting insensible on a garden step. He was immediately taken to Richmond Infirmary, but despite every

care he died three hours afterwards, of cerebral hæmorrhage, and on the 7th of June he was buried at Blatchington, near Seaford. Having thus sketched Tyler Smith's career, I will say a few words on the position he held as a lecturer, as an author, and as the founder of this Society.

With an unmelodious voice and a hesitating delivery, eloquence was out of the question, but most of you must have heard him place his facts in a marvellously logical and clear light. A fellow lecturer at Dermott's School, who has also risen to eminence as an obstetrician, describes him as disdaining to write his lectures, and as struggling on through all disadvantages, and by dint of perseverance becoming an effective lecturer, and says, although his mind was not sympathetic and failed to excite enthusiasm in his hearers, still he was always self-possessed, quick to catch the effect of what he was saying, and rarely failing to convince, instruct, and to lead. This can only be taken as a fair description of him at his best, for when his time had become more valuable, he fell into a slovenly style of lecturing, which was repeatedly complained of by the Medical Committee of St. Mary's Hospital.

As an author it is difficult to rate him too highly, for he was not only a philosophic thinker and an accomplished writer, but he had that priceless art of picturesque display, that woos a reader to become enamoured of a dry subject, and I cordially endorse Dr. Barnes's estimate of his 'Manual of Obstetrics' as vigorous in thought, complete and harmonious in conception, and as being written with a grace and clearness of which there had been no example in obstetric literature since the days of Denman. All this is the more remarkable, as the work was written lecture by lecture, as they were wanted for the 'Lancet,' and under the hard pressure of editorial duties and other avocations. His other work, on Leucorrhœa, is chiefly valuable because he therein settled the anatomy of the cervix by the excellent use he made of Dr. Arthur Hassall's microscopical drawings. With regard to his pathology, I shall only say that, however keen the controversy he had with Dr. H. Bennet, about the most

common diseases of women; chronic congestion, inflammation, and ulceration of the womb, their practice was wonderfully alike. Dr. Tyler Smith thoroughly adopted his great rival's teaching and his faith in nitrate of silver for their cure; nay, more, having lost all fear of mutilating the womb by the application of potassa fus. cum calc., Tyler Smith had no objection to use it in appropriate cases.

It is, however, as the founder of this Society that he is chiefly interesting to us.

In 1859 the narrow-minded policy of Sir Henry Halford had succumbed to a better feeling; the practice of midwifery no longer prevented a licentiate of the Royal College of Physicians from becoming a Fellow, but there was still much to be done to place us in our right position. Knowing that in all civilised countries there existed no other superiority among medical men than that due to personal merit, Tyler Smith felt indignant that there should be still amongst us medical men silly enough to claim to be better than we, merely because *they* were practising medicine or surgery and *we* obstetrics. He saw that instead of this being a sentimental grievance, it directly hampered the relations of obstetrics with the sister branches of medicine and with the State; and that although we were capital men as units, there was no chance of our obtaining our right influence, unless we became incorporated. Having determined to found an Obstetrical Society, he threw himself into the task with thorough self-devotion; and though not a popular man, such was the modesty of his behaviour and the tact he displayed, that the Society was speedily joined by all the leading obstetrical men of town and of the provinces. He never failed to watch over our interests with unobtrusive energy, always using his influence to place the best men in office, however much they might have crossed his path or might have differed from his views; and when a well-meant attempt was made to merge all medical societies into an Academy of Medicine, he made our consent dependent on Obstetrics being placed on a perfect level with medicine and surgery. This, as you know, was first conceded, then refused, so the scheme fell through, and I am

sure that all medical societies have been all the more flourishing for the preservation of their perfect freedom of individual action.

As health failed he seldom came to our meetings, but he was always at the Council when anything important was in hand, and he last attended, to propose me, a former opponent, for the office I now hold.

Such is my estimate of Tyler Smith's work, and this Society will be his best monument. With him ends the list of the men we lost last year; but when I just now mentioned St. Mary's Hospital, there flashed across my memory the image of another man, also gone to his account, and to whose indefatigable energy is partly due the existence of that noble institution. His name, ——, no longer to be mentioned amongst us, might have been placed among those of our illustrious dead, if his honesty had been at all equal to his surgical skill and to his unconquerable tenacity of purpose.

What have we done during the last year?

With regard to our number and our material prosperity we have lost 11 fellows by death, 11 by resignation, and we have been obliged to erase 9, because they were too busy to find time to pay their annual subscription. On the other hand, we have admitted 52 new fellows; the result is that we are stronger by 21 this year than last; and that, including 27 Honorary Fellows, we now muster 656.

Our financial position is good: we have about £1300 invested; and although we are acquiring a valuable obstetrical library, by a liberal expenditure of money, out of our last year's income of £818, your treasurer is able to carry forward £139 to this year's account.

Among the events of last year the foundation of the 'Obstetrical Journal' is one that cannot be passed over. It was an excellent idea of Dr. Aveling to attempt to concentrate in a monthly number what was best out of the current obstetrical literature of our own and other countries, and the well carrying out this idea would greatly aid the advance of obstetrical science.

With regard to our scientific work, you will judge of it by

the forthcoming volume of Transactions, but I think it would have been improved by a greater amount of recent hospital work. So many hospital men, metropolitan and provincial, belong to the Society, they work so hard, and find in our Transactions so safe and honorable a way of adding to their renown, that I feel convinced they need only be reminded that it is an axiom of medical societies, that the hospitals take care of the Transactions.

Your Council has been in communication with Government on three important subjects—the appointment of an obstetrician to a seat in the General Medical Council, the registration of stillborn children, and on the education and the registration of midwives.

The first subject may be made plain in a few words. On the one hand, two thirds of all the students who have studied, are studying, or will ever study medicine, must be general practitioners, and therefore their practice will be greatly made up of midwifery and of diseases of women and children. On the other hand, there is a General Council of Medical Education, composed of twenty-three distinguished men, who have no practical knowledge of obstetrical education, and who therefore cannot know how to provide for the education of general practitioners. It occurred to us, that if only one man out of the twenty-three, was in the thick of obstetrical teaching or practice, he might have set his colleagues right upon the things they could not understand. If, for instance, Dr. Arthur Farre had been on the Council, he would have told his colleagues that it was absurd to expect medical students to learn midwifery, diseases of women and children, and botany into the bargain, in three months, and that with such a regulation men might begin practice with some knowledge of midwifery, but with none of the diseases to which women and children were liable.

All this seemed so reasonable to your Council that, in 1866, we went up to the Home Secretary, and asked him to put an obstetrician on the General Medical Council. The Home Secretary sent our memorial to the Council, where it was read!

On the 6th of July, 1871, there was a discussion on obstetrical affairs, in the General Medical Council, which showed that we were right in believing, that it had no conception of what kind of education was required to turn medical students into good general practitioners.

They rejected Dr. Parkes's motion to allow more than three months for the study of obstetrics, although the Royal College of Surgeons, and almost all midwifery teachers, urged this extension; and while all the London examining bodies require the candidate for a midwifery licence to have attended twenty labour cases, the Council decided that even ten were too many. This, gentlemen, will enable you to understand why, when the Government seats in the Council became lately vacant, we again pressed our demand on the Home Secretary, who sent our memorial to the Privy Council, but before its reception the appointments had been already filled up. At some suitable time, our most reasonable request should be again pressed, and there is a greater chance of its being granted, now that all the medical institutions of the country are placed under the Privy Council, so judiciously advised by Mr. John Simon.

With regard to the registrations of stillbirths, you will remember that this was recommended, as the best means of checking infanticide and criminal abortion, by your Infantile Mortality Committee, which gave its report in 1869, so your Council willingly joined a deputation of the Parliamentary Committee of the British Medical Association, with the object of pressing on Mr. Stansfeld the including of the registry of stillbirths in his Registration Bill, but we could not make him see it.

The Parliamentary Committee of the British Medical Association and your Council have separately seen Mr. Stansfeld, on the "midwives'" question. We have convinced him of the urgency of educating them; but as any Bill to do so would have to be introduced into Parliament by the Privy Council, he has advised our seeing Lord Aberdare, promising to press the matter on his attention. And as part of our work in the coming year, should be to make another effort

to effect so useful a reform, I cannot do better than to conclude my Address by a brief but careful statement of the case.

While in every civilised country, at every medical school, a professor is deputed to instruct and examine midwives, in England uneducated and incompetent midwives have been allowed, up to the present time, to increase the mortality of women and children of the lower orders, and to increase parochial rates by the invaliding of women and the breaking up of homes. While the State has thus neglected to enable tens of thousands of respectable poor women to be safely confined, at such moderate cost as their limited means will allow, and while our governing medical bodies have hitherto neglected to press upon Government, that it alone could remedy the evil, the question has occupied our thoughts from our very foundation. Even in the meeting that was held to resolve on the formation of an Obstetrical Society, Sir W. Fergusson observed, "That the youngest man in the room might know the frightful results attendant on the practice of midwives in former times, and he congratulated the meeting that the step they were about to take would shake off all such dangers in time to come." And Dr. Routh added, "That, as on the Continent, it should be made obligatory on midwives to go through a regular course of study, and that the State was guilty to allow them to practice midwifery without such education." One of the suggestions of your Infantile Mortality Committee was the education of midwives, and as neither Government nor the medical corporations would entertain the matter, we ourselves instituted an examination. Our experience having convinced us that few midwives will come up for examination, unless it be made obligatory, we again lately appealed to Government, and I distinctly stated to Mr. Stansfeld, that it did not signify to us, whether Government availed itself of the machinery that our Society had set on foot to examine midwives, or whether Government did so by means of a State examining board of its own, totally independent of us. As some of the medical journals have recently represented us, as anxiously pressing to have the examination

of midwives entrusted to the Obstetrical Society, I once more state that we have been perfectly disinterested in this matter, and that our only object is to rescue from death, and from diseases worse than death, a large number of women, who have hitherto been the mute unnoticed victims of the State's neglect.

Dr. William Farr's repeated call for action in that direction, when discussing the mortality attending childbirth, in the Registrar-General's Reports, and our own efforts are beginning to tell. After fourteen years of existence the General Medical Council named a committee last year to inquire into the matter. The Royal College of Surgeons, after careful consideration, lately determined to have nothing to do with the examination and registration of midwives; so before long Government will be compelled to take action in the matter.

We have stated what we think a midwife ought to be. In our scheme, it is difficult to tell what midwives themselves would suggest; probably the most experienced among them would admit that midwives should pass an examination something like the Obstetrical Society's, and then be allowed to attend to midwifery, with all its complications, in whatever way they like. There is a third plan suggested to us by Mr. Stansfeld, which is, that besides the midwives wanted by the lower orders, there should be another class better instructed, and which should be allowed to attend unnatural labours, without having, however, received a complete medical education. As the proposition is specious, and will probably be adopted by the advocates of the rights of women, it is well to show its fallacy, and in the first place let us turn to the experience of other countries. Midwives receive different degrees of instruction according to the requirements of different countries, but none have two classes. A Russian midwife, having to live some fifty miles from medical advice, is instructed from two to three years, whereas in a densely populated country like France, medical advice being easily attainable, they require less knowledge, and only study from four to twelve months. I say that, practically speaking, there

is only one class of midwives in France, for the two are governed by similar rules, the only difference being that those graduating in a faculty of medicine can practise all over France, while those who have graduated in a provincial school can only practise in the surrounding district.

England being more densely populated than France, few midwives will be so placed as not to be within easy access of good obstetrical advice, so the State would go beyond its duty, if it did more than to provide for the poor midwives qualified to attend natural labour. You know by experience, that there is not one of the emergencies of labour that does not frequently tax our knowledge and our skill to the utmost, and that it would be dangerous to society to allow a midwife to treat unnatural labour, unless she has made herself a fully qualified medical woman. It will not be so very easy to find funds for the maintenance and the tuition of midwife "pupils" for a year, so that the poor may have midwives, not too proud to live in villages and in back slums, nor beneath taking five shillings as a usual fee for a midwifery case; but to ask Government to provide for the board and tuition of women for three or four years, so as to manufacture a superior kind of midwife, would be asking Parliament to found a medical college for women, which it will never do. I am therefore decidedly of opinion that it would be most undesirable to raise a new kind of medical practitioner, between a midwife for natural labour, and a fully educated medical man or woman.

While it is our duty to fully consider all the bearings of a measure, the discussion of which cannot be long delayed, we have still to awaken Government and public opinion to a due sense of its importance.

For instance, it is an axiom amongst us, that life must be protected against starvation, and still it has not yet entered the minds of statesmen, that they are equally bound to protect the lives of helpless mothers, and of their offspring, from the dangers of incompetent midwifery. While our legislators have been careful to protect the life of the immature burden of a woman's womb, they are obtusely

negligent of the risk to life incurred by thousands of poor women, able to safely bring forth perfect children if they had been only provided with fairly educated midwives. Again, this legislator is so impressed with the sanctity of life, that should a woman condemned to death be found pregnant, he postpones her execution until the child be born, supplying her with skilful attendance and every comfort, and yet he cares not how many thousand poor hard-struggling and uncomplaining women, about to be confined, are handed over to the tender mercies of incompetent women, whose ignorance is often alike fatal, whether rashness prompts them to expedite labour, or fear compels them to let slip the proper time for the action. During the last few years a very small group of noisy women have been declaiming and writing about the rights of women. It will neither be for the good of society nor for the happiness of women that they should assume our habits, occupation, and anxieties in addition to their own, which they cannot possibly throw off; but at all events, one would have thought that the first use these energetic women would have made of their newly acquired eloquence would have been to claim for thousands of English women of the speechless poorer classes, the first right of woman in all civilised countries—the right of being safely delivered of her children. Here was indeed a woman's question, a theme suggestive of eloquence, pregnant with pathos; but no—they leave it to us to plead for their sisters, and spend their time in clamouring for the right of voting for this and for that, for the right of respectable young women to walk the hospitals with medical students and to sit beside them before operation tables. You see, gentlemen, how full of anomalies is this secular neglect of all that relates to the midwifery of the poor, when once the light of common sense is thrown upon it.

Public opinion, our real sovereign, has not as yet been awakened to the magnitude of the evil; but public opinion is just like gunpowder, completely silent, inert, and immovable till it explodes, and it would only require a spark to kindle in public feeling a deep interest in what we have so

long had at heart. Would that it could burst out into one of those highly commendable spasmodic fits of virtuous indignation that force a Minister to redeem past neglect by speedily enacting a good remedial measure.

Dr. Tilt concluded by announcing that there would be an address on obstetrics at the next meeting of the British Medical Association, to be held at Norwich, and that it would be delivered by Dr. Matthews Duncan.

FEBRUARY 4TH, 1874.

EDWARD JOHN TILT, M.D., President, in the Chair.

Present—40 Fellows and 3 visitors.

Books were presented by Dr. Madge and Professor Rizzoli.

Mr. R. W. Parker was admitted a Fellow of the Society, and the following gentlemen were declared admitted: James E. Gibson (West Cowes); Arthur Nicholson (Newark-on-Trent); and Thomas Underhill, M.D. (West Bromwich).

The following gentlemen were elected Fellows: James Charlesworth, M.R.C.S. (Hanley); Wm. Henry Kempster, L.R.C.P.Ed. (Battersea); William Borwick Robertson, M.D. (West Dulwich); and Arthur Roper, M.R.C.S. (Blackheath).

The following gentlemen were proposed for election: Oliver Barber, M.R.C.S. (Sheffield); Robert M. Fraser, L.R.C.P.Ed. (Darlington); John Thomas Jones, M.R.C.S. (Llanfyllin); John Henry Mc Callum, M.B. (Toronto); and Stephen Skinner, M.B. (Clevedon).

The PRESIDENT addressed a few words to the meeting on the loss the Society had sustained in the death of the late Hon. Secretary, Dr. J. J. Phillips, and proposed a vote of

condolence to his family and friends, which was carried unanimously.

The PRESIDENT then mentioned that Dr. Arthur W. Edis had been nominated by the Council to fill the office of Secretary vacant by the death of Dr. Phillips.

Dr. T. C. HAYES exhibited a pessary which he had removed some days before from the vagina of a patient at King's College Hospital. The instrument originally had been an ordinary Hodge's lever pessary, but its shape had been so much altered, probably by the contractions of the vagina, that it closely resembled Dr. Graily Hewitt's cradle pessary. It had been placed in the vagina five years ago, and the patient had worn it without the slightest discomfort till about three months ago, when she experienced pain in the back and a bearing-down sensation. It was discovered by Dr. Hayes on examination that the concavity of the pessary had ulcerated into the anterior wall of the vagina, and was encircled by a firm transverse band. It was tightly impacted and could not be removed till the band had been nicked by a bistoury. Dr. Hayes thought that all patients who wore pessaries should from time to time submit themselves to medical examination.

Dr. EDIS mentioned a case that occurred to him where one end of a Hodge's pessary had completely buried itself in the posterior wall of the vagina. Instead, however, of cutting the band he divided the pessary, and thus extracted it—a safer plan, he thought, than dividing the band when this was broad or thick.

Dr. BARNES referred to similar cases recorded in his book, and quite agreed in the necessity of examining all patients wearing pessaries, at least once in every three months.

Dr. Playfair, Dr. Routh, and Dr. Wynn Williams, also spoke of the advisability of watching patients whilst wearing pessaries.

Mr. SIDNEY TURNER showed a specimen of tubal pregnancy occurring in a woman, æt. 35. She had previously one miscarriage at the third month, and had advanced about two

months in pregnancy at this time. Whilst she was out walking she was suddenly seized with pain in the hypogastrium, and was conveyed home in a cab, where shortly afterwards he saw her. She was then in a state of collapse, very blanched, cold, and pulseless, but perfectly sensible. He made an examination per vaginam, and found nothing but a uterus slightly increased in size. There was no hæmorrhage per vaginam, nor any bleeding in Douglas's pouch. From the suddenness of the attack, and the very anæmic appearance, he thought there was a rupture of an extra-uterine fœtation. Perfect rest was enjoined, but fifteen hours after the onset she suddenly jumped out of bed, and immediate fatal syncope was the result.

On post-mortem examination thirty-six hours after death the peritoneum was found filled with about three quarts of blood in a semi-coagulated state. The uterus was slightly enlarged, but contained no blood, although the Fallopian tube was pervious along its entire length. The right Fallopian tube was distended in its middle part to the size of a small egg, and here rupture had occurred. There was a well-marked Graafian vesicle on the ovary of that side, and some adhesions between the ovary and uterus had taken place, showing previous inflammatory mischief. The uterine cavity was filled by the deciduous membrane, which was not separated, but could easily be detached.

Dr. ROUTH asked if the idea of an exploratory incision had been at all entertained. In the case before them the supposition of perforation of the stomach or intestine (the latter in connection with typhoid fever) had, indeed, been raised, but neither appeared to have been seriously considered as present, whereas the sickness and arrest of menstruation had led early to a suspicion of pregnancy. Dr. Routh wished to know if full examination had been made to test this suspicion by rectal, vaginal, and stethoscopic investigation besides the other signs of gestation?

Mr. TURNER said he did not perform an exploratory operation and tie the Fallopian tube, as sometimes similar symptoms of collapse were produced by perforating ulcer of the stomach and by ulceration of Peyer's patches of the ileum, although the patient had not previously been under treatment for enteric

fever, and had, indeed, followed her occupation until the fatal occurrence.

Dr. Savage inquired how much blood was found in the peritoneal cavity; whether it was in a fluid state; how soon after death the post-mortem was performed; and what circumstances led to the idea that it was not an instance of tubular pregnancy? In regard to Dr. Routh's suggestion as to the advisability of an exploratory incision even when the patient was *in articulo*, Dr. Savage observed, he hoped no one would be induced to hazard exploratory incisions under such circumstances, since the discredit of killing the patient would fall, and rightly too, on the practitioner. He wished also to call attention to the loose attachments of the remarkably well-developed decidua; it could be easily detached, leaving, to all appearance, unchanged the internal surface of the uterus.

Dr. Hayes, Dr. Heywood Smith, Dr. Barnes, Dr. Wynn Williams, and Dr. Madge took part in the discussion.

ON THE MANAGEMENT OF DIFFICULT LABOUR WITH A MINOR DEGREE OF CONTRACTION OF BRIM.

By A. B. Steele, L.K.Q.C.P.I.

There are few emergencies in obstetric practice in which more mature judgment and nicer discrimination are required to determine the mode of treatment safest for mother and child than in the minor degrees of pelvic contraction.

The text-books, it is true, lay down definite rules for our guidance, and within certain limits these are useful, but as absolute indications in many cases they fail. It is not always possible to measure exactly the dimensions of the pelvic inlet, and in some instances of nice adjustment, or rather of very slight disproportion, the difference of a few lines in the pelvic capacity may determine the alternative between possible and impossible live birth. A further diffi-

culty inseparable from these cases is that, however accurately we may determine the measurements of the parturient canal, we have no means of ascertaining the size or condition of the fetal head; it may be either under or above the average size, and it may be compressible even beyond the usual degree or unduly firm and incompressible from advanced ossification. Of the two factors required for our estimation of the problem involved one is beyond our cognisance. The history of previous labours even will not always guide us aright. Women, after giving birth to a living child of average growth, at term and without assistance, have in subsequent labours been necessarily delivered with much difficulty with the forceps or turning, and in some instances by perforation. I have met with examples of this on several occasions. I delivered a patient in three successive labours with the perforator after repeated and prolonged fruitless attempts with the forceps, although her first child, a well-grown boy, then living, had been born without assistance. In another patient, whose case I shall presently relate, her first child was born alive "before the doctor came," while her four subsequent labours were all difficult and required forceps or version.

It is not within the scope or purpose of this communication to enter into the probable explanation of the different causes of these apparent anomalies; it may, however, be interesting to note one condition which may account for some of them. There are two distinct special deformities in the pelvic brim, in either of which the passage of the entire head may in the one case be easy, in the other impossible. In the oblique distortion of Naegele, which often exists to so slight an extent as to be unnoticed until labour comes on, and even then, perhaps, not accurately distinguishable, one side only of the brim is contracted, the opposite remaining undiminished. In such a case, if the vertex presents so that the head lies in the oblique pelvic diameter which is not encroached upon by the deformity, it meets with no obstruction and labour goes forward favorably; but if the vertex offers to or becomes engaged in the opposite con-

tracted oblique diameter, arrest or impaction, or both, are the natural result.

An analogous condition may occur also in those cases of conjugate contraction where the projecting sacral promontory, instead of jutting in a direct line forwards, deviates in a marked degree towards one or other of the ilio-sacral joints.

Until within a comparatively recent period the recognised practice in head labour arrested from contraction of the brim presented the alternatives of the forceps or perforator, but in the year 1847 the late Sir James Simpson suggested delivery by version in these cases as a substitute for instrumental delivery. The clear inductive reasoning, the sound and able arguments, and the accurate and extensive observation of facts upon which he has established this improved mode of practice, are doubtless familiar to most of you, constituting, as they do, some of the most interesting and valuable of his contributions to obstetric science. Simpson was first led to conceive the probable advantages of the operation, from having observed in his own practice, and in the records of that of others, that "mothers who had always suffered under very severe and instrumental labours when their children presented with the head foremost were not unfrequently fortunate enough to escape far more easily when at other times the infant chanced either to present originally with the feet, or had the feet brought down during the labour in consequence of the infant lying transversely with the arm or shoulder as the presenting part."

In corroboration of his own experience on this point he quotes a long array of illustrative cases from Smellie, Lee, Denman, and others. He goes on to show the theory or principles of the proposed practice, and also to point out its relative advantages, and to answer objections which had been raised against it. The fetal head at birth forms a cone, of which the base formed by the bismastoid diameter is the narrower part and is also incompressible, the bis-parietal diameter being wider and compressible. Now, when the brim of the pelvis is contracted and the head of the

child is forced down upon it as in a head presentation, or attempts are made to drag it through with the forceps, an obstacle is encountered which is likely to increase in a direct ratio with the force employed.

A round body is attempted to be pushed or drawn through an opening some lines smaller than itself, and, owing to the compressibility of the parietal bones, instead of entering the brim it is pressed down upon it, the bulging of its sides increasing the difficulty. When, however, the child is turned and delivered footling, the narrower diameter of the bismastoid or base enters the brim, and as it progresses, the compressible parietal bones are compressed laterally against the opposite sides of the pelvic brim, this lateral compression being much less dangerous to the life of the child than the oblique or longitudinal compression with the long forceps or by the long impaction of the head itself in the contracted brim. As compared with craniotomy, turning, in the first place, affords a fair chance of life to the child, while the former offers none; it is also safer to the life of the mother. Statistics show that craniotomy is fatal to the mother in about one in every five cases, while turning does not generally prove fatal in above one in every fifteen or sixteen cases. A further great source of safety to the mother is that, *cæteris paribus*, turning can be, and is as a general rule, adopted far earlier in the labour than delivery by craniotomy.

Maternal mortality attendant upon parturition, whether operative or natural, always increases in a ratio progressive with the increased duration of labour. Such, in brief, are Simpson's views; their soundness has been contested by M'Clintock, E. Martin, and others, but they are supported by Tyler Smith, Barnes, Schroeder, Leishman, and others, and may be regarded as fairly established as a rule of practice in this country. Schroeder even goes so far as to "recommend turning in all cases of pelvic contraction where this is not absolute." Leishman, however, takes a more cautious view, in which my own experience leads me to coincide, and in cases of contracted pelvis each of three

alternatives, viz. forceps, turning, and perforation, may demand consideration according to the circumstances of each individual case.

I propose now to relate some typical cases which occurred in my own practice which will serve to illustrate practical points in the management of this form of dystocia. I exclude altogether the question of forced labour before term, purposing on this occasion to treat simply of the management of a case in which labour at the full period has commenced.

For the history of the first case I am indebted to my friend Mr. C. B. Wilson, whose patient she is, and whom I attended with him in two labours.

A young healthy married woman, apparently well formed. In her first labour, 1865, the elbow presented; turning was effected easily, but there was very great difficulty in delivering the head. The child, a female, was stillborn. Puerperal mania followed, necessitating her removal to an asylum. She recovered, and the following year, 1866, again had a difficult labour; a female stillborn child was delivered by the forceps.

In 1867 she again had a dead female child, presenting the hand; delivered by turning, the head being very troublesome.

In 1869 another female child; head presentation; forceps applied, but failed; delivered by turning; child dead.

1870.—On this occasion I first saw the patient with Mr. Wilson. The vertex presented, and although labour was fairly advanced the head was entirely above the brim, which was diminished in the conjugate diameter by considerable projection of the sacral promontory. The forceps were applied and held firmly, but after repeated and forcible extractive efforts by Mr. Wilson and myself the head could not be made to engage the brim; we therefore decided to turn. This was accomplished not without much difficulty, in the extraction of the head. The child, a female, was born alive, but survived only a few hours.

In 1871 she was again in labour; a hand presenta-

tion. She was delivered by turning, the head again proving most difficult of extraction, and the child, a male, still-born.

In June of the present year (1873) her seventh labour came on, the head presenting, but remaining above the brim after active labour had lasted a short time. On receiving the summons from my friend Mr. Wilson, I went prepared for the emergency with Siebold's long forceps, hoping that with that powerful instrument we might succeed in bringing the head through without necessarily compromising the child's life. The forceps were applied without difficulty, and held firmly while as full an extent of tractive force was used as we deemed justifiable, but the head could not be brought into the brim. Version was resorted to, and the difficulty in delivering the head was so great, and the time occupied so protracted, that we entertained no expectation of anything but stillbirth. To our surprise and gratification, however, the child, a male, although apparently dead from asphyxia or syncope, showed signs of vitality, and respiration was fairly established. The forcible extraction of the head seemed to have produced some lesion of the spinal cord, for the arms were strongly rotated outwards and remained in this condition for several weeks after birth. There was also deformity of the face, the lower jaw being so much pressed to one side as to give the appearance of a fracture or dislocation. These conditions have gradually disappeared, and the child is now perfectly recovered, being nearly six months old.

It is obvious that the proper management of this patient would be the induction of premature labour, but she could not be induced to submit to the operation.

The next case was that of the wife of a dentist in this town, about thirty years of age, a strong, well-built woman, whose first child was born alive without assistance. Her second was stillborn with difficulty and delay, but without instrumental aid. In her third labour, in 1867, I was called in by her medical attendant, the late Dr. Goulstone. I found on my arrival the left arm in the vagina; the membranes had

been ruptured some hours. I turned without difficulty by seizing the right knee. The extraction of the head and shoulders was difficult and protracted, the arms becoming extended over the head. Pulsation in the cord ceased soon after the feet were brought down, and it was impossible to complete delivery in time to prevent stillbirth. Two years afterwards I was again summoned to this patient, and found the head presenting and fully engaged and firmly impacted in the brim. Labour commenced on the 4th July, the membranes ruptured on the 6th, my first visit being on the 7th. I delivered her at once with the forceps, powerful and protracted traction being necessary. The child, a male, was stillborn, its life having, no doubt, been sacrificed by delay.

In the event of a subsequent conception I suggested forced labour at the seventh or eighth month ; but this was declined positively by the patient, and therefore I suggested delivery at the earliest possible stage of labour.

I was again called to her in 1870, at the commencement of labour, the presentation being natural. I applied the forceps before the head had engaged the brim, and delivered her safely of a fine male living child.

This woman was taken in labour on the 20th of the present month. The head presented, and as soon as labour had fairly set in I applied the forceps above the brim, and had the satisfaction of again delivering her of a fine female living child.

The extraction of the head occupied rather more than an hour, and I was much relieved by the able assistance of my friend Mr. F. W. Lowndes, who administered chloroform, and took his turn at the long and strong pull which was required to bring the head through. With the exception of temporary paralysis of the bladder, she is making a good recovery.

The results in the two cases just related illustrate the view which I am disposed to take in reference to the management of labour in contracted pelvis of the minor degree, namely, that no absolute rule can be laid down as to the comparative

advantages of either of the three modes of delivery, viz. forceps, version, or craniotomy, except that the last is to be regarded only as a *dernier ressort*. In the first case turning appeared clearly to be preferable, or rather a necessary alternative, to the forceps, while in the latter the forceps delivery gave more satisfactory results than turning.

As a general rule I am disposed to consider the following as the proper course in head labour arrested from contracted pelvis, wherever there appears a reasonable prospect of the passage of the entire head.

When the head is still above or has only partially engaged the brim, a fair cautious trial of the forceps should be made.

The amount and duration of traction which may be safely borne by mother and child can only be determined by experience and judgment of the accoucheur in each case. Where, after reasonable efforts, the forceps fail to cause any advance of the head, turning is to be resorted to, and even after all we may be driven to embryotomy when the after-coming head cannot be otherwise delivered. This last operation, however, is neither more difficult nor dangerous than perforation in head-first labour.

When the head is fully engaged and firmly impacted, our choice must lie between forceps and craniotomy or cephalotripsy; the latter, however, should not, in my opinion, be adopted when perforation alone is likely to succeed, as the fewer instruments used, and the less complicated our operative proceedings, the safer it will be for the mother.

Circumstances may exist which would induce us to give turning at once the preference, as in the first case related, where in future labours I should deem it unadvisable to apply the forceps, having sufficiently proved their inefficiency in that particular case.

Of course we must not forget the contra-indications of turning under any circumstances, viz.—

1. A conjugate diameter narrowed to less than three inches.

2. Firm and close contraction of the uterus round the child.

3. Impaction, or very firm settling of the head in the brim of the pelvis.

4. Marked exhaustion or prostration of the mother.

The sudden emptying of the uterus of a woman far gone in prostation, acting as a new shock, is apt to increase the *collapsus post partum,* and will almost certainly prove fatal.

The vital importance of this caution urged by Dr. Barnes cannot be overstated. It has been my misfortune more than once to see a woman die through neglect of it. To these contra-indications Dr. Barnes adds a fifth, namely, the death of the child, but I am not prepared to admit this as an absolute bar to delivery by turning in every case of contracted pelvis. I would premise that probably in the majority of instances the evidence of the child's death, however strong, would not be reduced to an absolute certainty. When, however, the child is ascertained to be dead, in considering the question of version or craniotomy we must not forget that the maternal mortality in the former is only one third of that in the latter. If we are satisfied that turning is safer or as safe as craniotomy, it should be preferred, as less repugnant to the feelings of all concerned; besides which, we thus avoid the possible chance of destroying the life of a child, when even the most careful diagnosis may have failed us as to its actual condition.

In most cases the only real difficulty in delivery by turning, or I should perhaps say the most important obstacle to the complete success of the operation, is the extraction of the after-coming head. On this point I would make two suggestions, founded on the teaching of Simpson and Barnes, and fully corroborated by my own experience, both of which are at variance with the directions very commonly met with in the text-books.

The first has the sanction of both the eminent authorities I have quoted. It is to avoid, when bringing down the feet, any direct interference for the rotation of the child's abdomen

towards the back of the mother, with the object of causing the face to rotate towards the sacro-iliac synchondrosis. The necessary movement occurs more favorably and more certainly at the proper time, by the natural mechanism, which is liable to be interfered with by artificial aid. Simpson strongly insists on this view, and Barnes does not hesitate to denounce the opposite course as meddlesome midwifery of a very mischievous character.

The other suggestion has reference to the mode of extracting the head, is recommended by Barnes, and has proved very successful in my hands. The time-honoured direction when the head causes difficulty is, that the accoucheur should place the finger or fingers of one hand in the child's mouth and depress the lower jaw towards its sternum, while the fingers of the opposite hand are placed under the arch of the pubis, and pressure made upwards and backwards against the child's occiput, so as to increase the movement of flexion. The first manœuvre, as Barnes points out, is simply useless, being founded on a misapprehension of the principles of the mechanism of labour, the chin never really catching against the promontory; while as to the second, I must confess I have never been able, in the way described, to produce the slightest impression upon a firmly fixed head.

Barnes's plan is as follows:—To make simple traction, forking the fingers of one hand over the nape of the child's neck, to guide the head in the proper direction, and holding the legs with the other hand. Generally this is sufficient; but if more force is needed, an assistant may make traction by the legs, or a napkin or silk handkerchief may be crossed over the neck, bringing the ends in front of the chest and drawing upon them. The main point is direct traction as much backwards as possible, so as to make the head revolve round the jutting sacral promontory, after which the traction is changed to the direction of the outlet.

I say nothing of the forceps to the after-coming head, as I believe it is generally acknowledged by practical accoucheurs that hand delivery has the advantage as a general rule.

In conclusion I wish to say that, while of course in certain cases perforation is after all the only safe mode of delivery, even in minor degrees of pelvic contraction, still, by a fair trial of the other two modes of delivery, and especially by turning when the forceps fail, we can materially reduce the number of instances in which craniotomy must otherwise be practised, and under circumstances in which only a few years ago it would have been adopted without hesitation.

Dr. J. Braxton Hicks remarked upon the advantage of resorting to version in place of employing the forceps.

ON PUERPERAL THROMBOSIS.

By W. J. Playfair, M.D., F.R.C.P.,

PROFESSOR OF OBSTETRIC MEDICINE IN KING'S COLLEGE; PHYSICIAN FOR THE DISEASES OF WOMEN AND CHILDREN TO KING'S COLLEGE HOSPITAL; AND EXAMINER IN MIDWIFERY AND THE DISEASES OF WOMEN AT THE ROYAL COLLEGE OF PHYSICIANS.

Under the head of Thrombosis we may class several important diseases connected with the puerperal state which have received far less attention than they deserve. It is only of late years that some, we may probably safely say the majority, of those terribly sudden deaths which, from time to time, occur after delivery have been traced to their true cause in the obstruction of the right side of the heart and pulmonary arteries by a blood-clot, often carried from a distance and impacted in the pulmonary arteries, or, as I shall hope to show, originally formed *in sitû*. Although the result, and, to a great extent, the symptoms are identical in both, still a careful consideration of the history of these two classes of causes tends to show that in their causation they

are distinct, and that they ought not to be confounded together. In the former, in which the obstruction is caused by a clot carried from a distance, we have a secondary result of the clotting of blood in some parts of the peripheral venous system, the separation of a portion of this being an accident due to changes in the original coagulum, which undergoes retrograde metamorphosis, tending to its eventual absorption. In the latter we have a local deposition of fibrine, the result of blood changes consequent on pregnancy and the puerperal state. The formation of this coagulum in vessels, the complete obstruction of which is incompatible with life, explains the fatal results. When, however, the coagulum chances to be formed in more distant parts of the circulation the vital functions are not immediately interfered with, and we have other phenomena occurring due to the obstruction. The disease known as phlegmasia dolens I believe to be one of the secondary results of blood-clots forming in the peripheral vessels. But from the evident and tangible symptoms it produces it has long been considered an essential and special disease, and the general dyscrasia which produces it, as well as other allied states, has not been studied separately. I shall hope to show that all these various conditions, dissimilar as they at first sight appear, are very closely connected, that they are, in fact, due to a common cause; and thus, I think, that we shall arrive at a clearer and more correct idea of their true nature than if we looked upon them as distinct and separate affections, as has been commonly done.

I am aware that in phlegmasia dolens, the pathology of which has received more study than that of perhaps any other puerperal affection, something beyond the simple obstruction of the venous system of the affected limb is probably required to account for the peculiar tense and shiny swelling which is characteristic of the disease. Whether this is an obstruction of the lymphatics, as Dr. Tilbury Fox and others have maintained with much show of reason, or whether it is some as yet undiscovered state, farther investigation is required to show. But it is beyond any doubt that

the important and essential part of the disease is the presence of thrombus in the vessels, and I think it will not be difficult to prove that in its causation and history it is precisely similar to the more serious cases in which the central vessels are involved.

It will be well to commence the study of the subject by a consideration of the conditions which, in the puerperal state, render the blood so peculiarly liable to coagulation, and we may then proceed to discuss the symptoms and results of the formation of coagula in various parts of the circulatory system.

The researches of Virchow, Benjamin Ball, Humphry, Richardson, and others, have rendered us tolerably familiar with the conditions which favour the coagulation of blood in living vessels. These are chiefly:—

1. A stagnant and arrested circulation, as, for example, as has been pointed out by Moxon,[1] where the blood coagulates in the veins from the gluteal region in old and bedridden people, or in some forms of pulmonary thrombosis where the clots formed in the arteries are probably the results of obstructed circulation in the lung capillaries, as in certain cases of emphysema, pneumonia, or pulmonary apoplexy.

2. A mechanical obstruction around which coagula form, as in certain morbid states of the vessels; or, a better example still, the secondary coagula which form around a travelled embolus impacted in the pulmonary arteries.

3, And most important of all, some morbid state of the blood itself by which the tendency to the deposition of fibrine is increased. Examples of this latter condition are frequently met with in the course of various diseases, such as rheumatism or fever, in which the quantity of the fibrine is increased, or the blood itself is loaded with morbid materials. Thrombus from this cause is of by no means unfrequent occurrence after severe surgical operations, especially such as have been attended with much hæmorrhage, or when

[1] 'Guy's Hospital Reports,' 1869.

the patient is in a weak and anæmic condition. This has been especially dwelt upon as a not unfrequent cause of death after operations by Fayrer and other surgeons.[1] But little consideration is required to show why thrombosis plays so important a part in the puerperal state, for then most of the causes favouring its occurrence are of necessity present. Probably there is no other condition in which they exist in so marked a degree, or are so frequently combined together. The blood itself during pregnancy contains an excess of fibrine, the quantity of which largely increases towards the latter months of utero-gestation, until, as has been pointed out by Andral and Gavarret, it not unfrequently contains more than a third of the average amount present in the non-pregnant state. As soon as delivery has taken place other causes of blood-dyscrasia come into operation. Involution of the largely hypertrophied uterus commences, and the blood is charged with a quantity of effete material which must be present in greater or less amount until that process is completed.

It is an old observation that phlegmasia dolens is of very common occurrence in patients who have lost much blood during labour. Thus Dr. Leishman says,[2] "In no class of cases has it been so frequently observed as in women, whose strength has been reduced to a low ebb by hæmorrhage either during or after labour; and this, no doubt, accounts for the observations made by Merriman, that it is relatively a common occurrence after placenta prævia." An examination of the cases in which death results from pulmonary thrombosis shows precisely the same facts, as in a large proportion of them severe post-partum hæmorrhage is stated to have occurred. The exhaustion following the excessive losses so common after labour must itself strongly predispose to thrombosis; and, indeed, loss of blood has been distinctly pointed out by Richardson to be one of its most common antecedents. "There is," he says, "a condition

1 'Edin. Med. Journ.,' March, 1868; and 'Annals of Med.,' July, 1867.

2 'System of Obstet.,' p. 710.

which has been long known to favour coagulation and fibrinous deposition—I mean loss of blood and syncope, or exhaustion during impoverished state of the body." Since, then, so many of the predisposing causes of thrombosis are to be found present in the puerperal state, it is hardly a matter of astonishment that it should be of frequent occurrence, or that it should lead to conditions of serious gravity. And yet the attention of the profession has been for the most part limited to a study of one only of the results of this tendency to blood-clotting after delivery, no doubt because of its comparative frequency and evident symptoms. True, the balance of professional opinion has lately held that phlegmasia dolens is chiefly the result of some morbid condition of the blood producing plugging of the veins; but the wider view which I am attempting to maintain, which would bring the disease into close relation with the more rarely observed, but infinitely important obstructions of the pulmonary arteries, has scarcely, if at all, been insisted on. Doubtless further investigations will show that it is not in these parts of the venous system alone that puerperal thrombosis occurs, but the symptoms and effects of venous obstructions elsewhere, important though they may be, are unknown, and, for the present, I must content myself with dwelling on it as it occurs in them.

I propose, then, to describe the symptoms and pathology, so far as they are yet known to us, of blood-clot as it occurs in the right side of the heart and pulmonary arteries. It may be useful here to repeat that this is essentially distinct from embolism of the same parts. The latter is due to the impaction of a separated portion of thrombus formed elsewhere, and for its production it is essential that thrombosis should have preceded it. Embolism is in fact an accident of thrombosis, not a primary affection. The condition I am now discussing I hold to be a primary thrombosis, precisely similar in its causation to the venous obstructions which in other situations give rise to phlegmasia dolens.

At the threshold of the inquiry we have to meet the objection, started by several who have written on the

subject,[1] that spontaneous coagulation of the blood in the right side of the heart and pulmonary arteries is a mechanical and physiological impossibility. This was the view of Virchow, who, with his followers, maintained that whenever death from pulmonary obstruction occurred, embolus was of necessity the starting-point of the malady, and the nucleus round which secondary deposition of fibrine took place. Virchow held that the primary factor in thrombosis was a stagnant state of the blood, and that the impulse imparted to it by the action of the right ventricle was, of itself, sufficient to prevent coagulation taking place. It is to be observed that these objections are purely theoretical. Without denying at all that there is considerable force in the arguments used, I think that the clinical history of these cases strongly favours the view which admits the possibility of spontaneous coagulation, and I would apply to the theoretical objections advanced, the argument used by one of their strongest upholders, with regard to another disputed point: "Je prefère laisser la parole aux faits, car devant eux la theorie s'incline."[2]

The anatomical arrangements of the pulmonary arteries themselves show how spontaneous coagulation may be favoured in them, for, as Dr. Humphry has pointed out,[3] "the artery breaks up at once into a number of branches, which radiate from it at different angles to the several parts of the lungs. Consequently, a large extent of surface is presented to the blood, and there are numerous angular projections into the current, both which conditions are calculated to induce the spontaneous coagulation of the fibrine." We know, also, that thrombosis generally occurs in patients of feeble constitution, often debilitated by hæmorrhage, in whom the action of the heart is much weakened. These facts, of themselves, go far to meet the objections of those who deny the possibility of spontaneous coagulation at the roots of the

[1] See especially Bertin, 'Des Embolies,' p. 46, *et seq.*

[2] Bertin, op. cit., p. 149.

[3] Humphry 'On the Coagulation of the Blood in the Venous System during Life.'

pulmonary arteries. The records of post-mortem examinations show, also, that in many of the cases the right side of the heart, as well as the large branches of the pulmonary arteries, contained firm, leathery, decolorised, and laminated coagula which could not have been recently formed. The advocates of this purely embolic theory maintain that these are secondary coagula formed around an embolus. But surely the mechanical causes which are sufficient to prevent the spontaneous deposition of fibrine would also suffice to prevent its gathering round an embolus, unless, indeed, the obstruction were sufficient to arrest the circulation altogether, when death would occur before there was any time for secondary deposits? Before we admit the possibility of embolism we must have at least one factor, the existence of thrombosis in a peripheral vein from which an embolism can come. In many of the recorded cases nothing of the kind was found; and although, as it is argued, this may have been overlooked, yet such an oversight can hardly always have been made. The strongest clinical argument, however, in favour of the spontaneous origin of pulmonary thrombosis, is one which I originally pointed out in a series of papers on "Thrombosis and Embolism of the Pulmonary Arteries as a Cause of Death in the Puerperal State."[1] I have showed, from a careful analysis of twenty-five cases of sudden death after delivery, in which accurate post-mortem examinations had been made, that cases of spontaneous thrombosis and true embolism may be divided from each other by a clear line of demarcation, depending on the period after delivery at which the fatal result occurs. In seven out of twenty-five cases there was distinct evidence of true embolism, and in these the deaths occurred at a remote period after delivery; in nine of them before the nineteenth day. This contrasts remarkably with the cases in which the post-mortem examination afforded no evidence of true embolism. These amounted to fifteen out of the twenty-five, and in all of them, with one exception,

[1] 'Lancet,' 1867.

the death occurred before the fourteenth day, often on the second or third. The reason of this seems to be that, in the former, time is required to admit of degenerative changes taking place in the deposited fibrine, so as to admit of the separation of an embolus; while, in the latter, the thrombosis corresponds in time, to a great extent, no doubt, also in cause, to the original peripheral thrombosis from which in the former an embolus was derived. Many cases I have since collected illustrate the same rule in a very curious and instructive way.

Another clinical fact I have observed also points to the same conclusion. In one or two cases distinct signs of pulmonary obstruction have shown themselves without proving immediatly fatal, and shortly *afterwards* peripheral thrombosis, as evidenced by phlegmasia dolens of one extremity, has commenced. Here obviously the peripheral thrombosis followed the central, both being produced by an identical cause, and the order of events necessary on the purely embolic theory was reversed.

I hold, then, that those who deny the possibility of spontaneous coagulation in the heart and pulmonary arteries have not grounds enough to justify their objection, and that we may consider it to be an occurrence, rare, no doubt, but still sufficiently often met with, and certainly of more than sufficient importance to merit very careful study.

Dr. Meigs, of Philadelphia, was one of the first to direct attention to the possibility of spontaneous coagulation of the blood in the right side of the heart and pulmonary arteries as a cause of death in the puerperal state.[1] The occurrence itself, however, had been carefully studied by Paget, whose paper was published in 1845, four years before Meigs wrote on the subject.[2] It is true that none of Paget's cases happened after delivery, but he none the less accurately apprehended the nature of the obstruction.

In 1855, Hecker[3] attributed the majority of these cases to

[1] 'Phil. Med. Exam.,' 1849.

[2] 'Med. Chir. Trans.,' vol. xxvii, p. 162, and vol. xxviii, p. 352.

[3] 'Deutsche Klinik,' 1855.

embolism proper, and since that date most authors have taken the same view, believing that spontaneous coagulation only occurs in exceptional cases, such as when, on account of some obstruction in the lung, coagula form in the smaller ramifications of the pulmonary arteries, gradually creeping backwards towards the heart, or in the debility of the last few hours before death.

The symptoms of these cases are of a nature which can hardly be mistaken, and there seems to be no essential difference between the symptomatology of cases of spontaneous and embolic obstruction, so that the same description will suffice for both. In a large proportion of the cases the attack comes on with an appalling suddenness which is one of its most striking characteristics. Nothing in the condition of the patient need have given rise to the least suspicion of impending mischief, when, all at once, an intense and horrible dyspnœa comes on, the patient gasps and struggles for breath, tears off the coverings from her chest in a vain endeavour to get more air, and too often dies in a few minutes, long before medical aid can be had, with all the symptoms of asphyxia. The muscles of the face and thorax appear to be violently agitated in the attempt to oxygenate the blood, and an appearance closely resembling the epileptic convulsion may be presented. The face may be either pale or deeply cyanosed. Thus in one case I have elsewhere recorded,[1] which was an undoubted example of true embolism, Mr. Pedler, the House Physician at King's College Hospital, who was present during the attack, writes of the patient: "She was suffering from extreme dyspnœa, the countenance was excessively pale, her lips white, the face generally expressing extreme anxiety." In another, which was probably an example of spontaneous thrombosis occurring on the twelfth day after delivery, it is stated:[2] "The face had assumed a livid purple hue, which was so remarkable as to attract the attention of both the nurse and of the mother, who was with her." The extreme embarrassment of the circulation is

[1] 'Brit. Med. Journ.,' March 27th, 1869.

[2] 'Obst. Trans.,' vol. xiii, p. 194.

shown by the tumultuous and irregular action of the heart, which is occupied in a fruitless endeavour to send the venous blood through the obstructed arteries. Soon it gets exhausted, as shown by its feeble and fluttering beat. The pulse is thread-like and nearly imperceptible; the respiration short and hurried, but air may be heard entering the lungs freely. The intelligence during the struggle is unimpaired, and the dreadful consciousness of impending death adds not a little to the patient's sufferings, and to the terror of the scene. Such is an imperfect account of the symptoms, gathered from a record of what has been observed in fatal cases. It will be readily understood why, in the presence of so sudden and awful an attack, symptoms have not been recorded with the accuracy of ordinary clinical observation.

A question of great practical interest, and one which has been entirely overlooked by writers on the subject, is, Have we any grounds for supposing that there is a possibility of recovery after the symptoms of pulmonary obstruction have developed themselves? That such a result must be of extreme rarity is beyond any question, but I have but little doubt that in some few cases, entirely inexplicable on every other hypothesis, life is prolonged until the coagulum is absorbed and the pulmonary circulation restored.

In order to admit of this it is, of course, essential that the obstruction be not sufficient to prevent the passage of a certain quantity of blood to the lungs, sufficient to carry on the vital functions. The history of many cases tends to show that the obstructing clot was present for a considerable time before death, and that it was only when some sudden exertion was made, such as rising from bed, or the like, calling for an increased supply which could not pass through the occluded vessels, that fatal symptoms manifested themselves. This was long ago pointed out by Paget, who says:[1] "The case proves that, in certain circumstances, a great part of his pulmonary circulation may be arrested in the course of a week (or a few days, more or less) without immediate

[1] Op. cit., p. 358.

danger to life, or any indication of what has happened." And, after referring to some illustrative cases, "Yet, in all these cases, the characters of the clots by which the pulmonary arteries were obstructed showed plainly that they had been a week or more in the process of formation."

If we admit the possibility of the continuance of life for a certain time, we must, I think, also admit the possibility, in a few rare cases, of eventual complete recovery. What is required is time for the absorption of the clot. In the peripheral venous system coagula are constantly removed by absorption. So strong, indeed, is the tendency to this that Humphry observes with regard to it,[1] "It appears that the blood is almost sure to revert to its natural channel in process of time." If, then, the obstruction be only partial, if sufficient blood passes to keep the patient alive, and a sudden supply of oxygenated blood is not demanded by any exertion which the embarrassed circulation is unable to meet, it is not inconceivable that the patient may live until the obstruction is removed. Such I believe to be the only explanation of certain cases, some of which, on any other hypothesis, it is impossible to understand. The symptoms are precisely those of pulmonary obstruction, and the description I have given above may be applied to them in every particular, and, after repeated paroxysms, each of which seems to threaten immediate dissolution, an eventual recovery takes place. What, then, I am entitled to ask, can this condition be if not that which I suggest? What other disease is capable of producing symptoms so characteristic and remarkable?

As the question I am considering has never, so far as I am aware, been treated by any other writer, I may be permitted very briefly to state the facts of one or two of the cases on which I found my argument, some of which I have already published in detail elsewhere.

Case 1.—K. H—, a delicate young lady. Labour easy. Primipara. Profuse post-partum hæmorrhage. Did well until

[1] 'Med.-Chir. Trans.,' vol. xxviii, p. 14.

the seventh day, during the whole of which she felt weak. On the same day an alarming attack of dyspnœa came on. For several days she remained in a very critical condition, the slightest exertion bringing on the attacks. A slight blowing murmur was heard for a few days at the base of the heart and then disappeared. For two months the patient remained in the same state. As long as she was in the recumbent position she felt pretty comfortable, but any attempt at sitting up in bed, or any unusual exertion, immediately brought on the embarrassed respiration. During all this time it was found necessary to administer stimulants profusely to ward off the attacks. Eventually the patient recovered completely.

Case 2.—Mrs. F—, æt. 44, mother of twelve children, confined July 6th. On the eleventh day after delivery she went to bed feeling well. At that time there was no swelling or discomfort of any kind about her lower extremities. About half-past three she was sitting up in bed, when she was suddenly attacked with an indescribable sense of oppression in the chest, and fell back, in a semi-unconscious state, gasping for breath. She remained in a very critical condition indeed, with the same symptoms of embarrassed respiration for three days, when they gradually passed away. Two days *after* the attack phlegmasia dolens came on, the left leg swelled, and remained so for several months.

This case is an example of the fact I have already referred to of phlegmasia dolens coming on after the symptoms of pulmonary obstruction had manifested themselves, the inference being that both depended on similar causes operating on two distant parts of the circulatory system.

Case 3.—C. H—, æt. 24, confined of her first child August 20th. Thirty hours after delivery she complained of great weakness and dyspnœa. This was alleviated by the treatment employed; but on the ninth day, after making a sudden exertion, the dyspnœa returned with increased violence, and continued unabated until I saw the patient on

the 4th of September, fourteen days after her confinement. The following are the notes of her condition made at the time of the visit: "I found her sitting on a sofa propped up with pillows, as she said she could not breathe in the recumbent position. The least excitement or talking brought on the most aggravated dyspnœa, which was so bad as to threaten almost instant death. Her sufferings during these paroxysms were terrible to witness. She panted and struggled for breath, and her chest heaved with short gasping respirations. She could not even bear to have any one to stand in front of her, waving them away with her hand, and calling for more air. These attacks were very frequent, and were brought on by the most trivial causes. She talked in a low suppressed voice, as if she could not spare breath for articulation. On auscultation air was found to enter the lungs freely in every direction, both in front and behind. Immediately over the site of the pulmonary arteries there was a distinct, harsh, rasping murmur, confined to a very limited space, and not propagated either upwards or downwards. The heart's sounds were feeble and tumultuous." These symptoms led me to diagnose pulmonary obstruction, and I, of course, gave a most unfavorable prognosis, but to my great surprise the patient slowly recovered. I saw her again six weeks later, when her heart's sounds were regular and distinct, and the murmur had completely disappeared.

Case 4.—Mrs. E—, æt. 42, was confined of her first child on the 3rd of November, in the sixth month of utero-gestation. She had severe post-partum hæmorrhage depending on partially adherent placenta, which was removed artificially. She did perfectly well until the fourteenth day after delivery, when she was suddenly attacked with intense dyspnœa, aggravated in paroxysms. Pulse pretty full, 120, but distinctly intermittent. Air entered lungs freely. The heart's action was fluttering and irregular, and at the junction of the fourth and fifth rib with the sternum there was a loud blowing systolic murmur. This was certainly non-existent before delivery, as at the patient's own request the

heart had been carefully auscultated before the inhalation of chloroform during her labour had been commenced. For two days the patient continued in the same state, her death being almost instantaneously expected.

On the 21st, that is, two days *after* the appearance of the chest symptoms, phlegmasia dolens of a severe kind developed itself in the right thigh and leg. She continued in the same state for many days, lying more or less tranquilly, but having paroxysms of the most intense apnœa, varying from two to six or eight in the twenty-four hours. No one who saw her in one of these could have expected her to live through it. The attacks were always relieved by stimulants. These she incessantly called for, declaring she felt they kept her alive. During all this time her mind was clear and collected. The pulse varied from 110 to 130. Respirations about 60. Temperature 101° to 102·5°. Shortly after the first appearance of the paroxysms it was observed that the cellular tissue of the neck and part of her face became swollen and œdematous, giving an appearance not unlike that of phlegmasia dolens. By slow degrees the patient seemed to be rallying. The paroxysms diminished in number, and after the 1st of December she never had another, and the breathing became free and easy. The pulse fell to 80, and the cardiac murmur entirely disappeared. The patient remained, however, very weak and feeble, and the debility seemed to increase. Towards the second week in December she became delirious and died, apparently exhausted, without any fresh chest symptoms, on the 19th of that month.

No post-mortem was allowed.

I have narrated this case, although it terminated fatally, because I hold it to be one of the class I am considering. The death was certainly not due to the obstruction, all symptoms of which had disappeared, but apparently to exhaustion the result of the severity of the former illness. It illustrates, too, the simultaneous appearance of symptoms of pulmonary obstruction and peripheral thrombosis. The swelling of the neck was a curious symptom, which has

not been recorded in any other case, and may possibly be a farther proof of the analogy between this condition and phlegmasia dolens.

Now it may of course be said that these cases do not prove my thesis, inasmuch as I only assume the presence of a coagulum. But I may fairly ask in return, What other condition could possibly explain the symptoms? They are precisely these which are noticed in death from undoubted pulmonary obstruction. No one seeing one of them, or even reading an account of the symptoms while ignorant of the result, could hesitate a single instant in his diagnosis. Surely, then, the inference is plain that they depended on the same cause? In the very nature of things my hypothesis cannot be verified by post-mortem examination, but there is at least one case on record in which after similar symptoms a clot was actually found. The case is related by Dr. Richardson.[1] It was that of a man who for weeks had symptoms precisely similar to those observed in the cases I have narrated. In one of his agonising struggles for breath he died, and after death it was found "that a fibrinous band having its hold in the ventricle, extended into the pulmonary artery." The observation proves to a certainty that life may continue for weeks after the deposition of a coagulum, and moreover the condition was precisely what we should anticipate, since, of course, the obstructing coagulum must necessarily be small, otherwise the vital functions would be immediately arrested. There is a symptom noted in two of the above cases, and to a less extent in a third, which has not been mentioned in any account of fatal cases, that is, the presence of a distinct murmur over the site of the pulmonary arteries. It is a sign that we should naturally expect, and it proves that the cause of the disease was at least cardiac. Very possibly it would be met with in fatal cases were attention more particularly directed to it. In both these instances it was exceedingly well marked, and in both it entirely disappeared

[1] 'Clinical Essays,' p. 224, *et seq.*

when the symptoms abated. The probability of such a murmur being audible in cases of thrombosis of the pulmonary artery has been, however, recognised by one of our highest authorities in cardiac disease.[1] In the last edition of his clinical work on 'Diseases of the Heart,' Dr. Walshe says, "The only physical condition connected with the vessel itself would probably be systolic basic murmur following the course of the pulmonary main trunk, and of its immediate divisions, to the left and right of the sternum. This sign I most certainly heard in an old gentleman whose life was brought to a sudden close, in the course of an acute affection, by coagulation in the pulmonary artery, and to a moderate extent in the right ventricle." Similar cases have probably been overlooked or misinterpreted; many seem to have been attributed to shock in the absence of a better explanation, a condition to which they bear no kind of resemblance.

The precise mode of death in pulmonary obstruction, whether dependent on thrombosis or embolism, has given rise to considerable difference of opinion. Virchow attributes it to syncope,[2] depending on stoppage of the cardiac contraction. Panum,[3] on the other hand, contests this view, maintaining that the heart continues to beat even after all signs of life have ceased. Certainly tumultuous and irregular pulsations of the heart form a prominent symptom in most of the recorded cases, and one not reconcilable with the idea of syncope. Panum's own theory is that death is the result of cerebral anæmia. Paget seems to think that the mode of death is altogether peculiar, in some respects resembling syncope, in others anæmia. Bertin, who has discussed the subject at great length, attributes the fatal result purely to asphyxia. The condition is, indeed, in all respects similar to that state, the oxygenation of blood being prevented, not because air cannot get to the blood, but because the blood cannot get to the air. The symptoms also seem best explained by this theory, the intense dyspnœa, the terrible struggle for air, the

1 Walshe, 'Diseases of the Heart,' 4th edit., 1873.

2 'Gesamm. Abhandl.,' 1862, p. 316.

3 Virchow's 'Archives,' 1863.

preservation of intelligence, the tumultuous action of the heart, which are certainly characteristic neither of syncope nor anæmia.

The precise anatomical character of the clots seems to vary considerably. Ball, by whom they have been most carefully described, believes that they more generally commence in the smaller ramifications of the arteries, extending backwards towards the heart, and filling the vessels more or less completely. Towards their cardiac extremity the coagulum terminates in a rounded head, in which respect they resemble coagula formed in peripheral veins. They are not adherent to the coats of the vessels, and the blood circulates, when it can do so at all, between them and the vascular walls. Such clots are white, dense, and of a homogeneous structure, consisting of layers of decolorised fibrine, dense in the periphery, where the fibrine has been most recently deposited, and softened in the centre where amylaceous or fatty degeneration has commenced. Ball maintains that if coagulation commences in the larger branches of the artery, it must first have begun in the heart, and extended into them from the ventricle. Apparently the same changes take place in pulmonary as in peripheral thrombi, and thus they may become adherent to the walls of the vessels, or converted into threads or bands.

When the obstruction is due to embolism, provided the case is a well-marked one, and the embolus of some size, the appearances presented are different. We have no longer the laminated decolorised coagulum, with a rounded head, similar to a peripheral thrombus. The obstruction in this case generally takes place at the point of bifurcation of the artery, and we there meet with a greyish-white mass, contrasting remarkably with the more recently deposited fibrine before and behind it. It may be that the form of the embolus shows that it has recently been separated from a clot elsewhere; and, in many cases, it has been possible to fit the travelled portion to the extremity of the clot from which it has been broken. We may also, perhaps, find that the embolus has undergone an amount of retrograde metamorphosis corre-

sponding to that of the peripheral thrombus from which we suppose it to have come, but differing from that of the more recently deposited fibrine around it. It must be admitted, however, that the anatomical peculiarities of the coagula will by no means always enable us to trace them to their true origin. In many cases emboli may escape detection from their smallness of size, or from the quantity of fibrine surrounding them.

But few words need be said as to the treatment of pulmonary obstruction. In but too large a majority of the cases the fatal result so rapidly follows the appearance of the symptoms that no time is given us even to make an attempt to alleviate the patient's sufferings. Should we meet with a case not immediately fatal, it would seem that there are but two indications of treatment affording the slightest rational ground for hope:

1. To keep the patient alive by the administration of stimulants, brandy, ether, ammonia, and the like, to be repeated at intervals corresponding to the intensity of the paroxysms and the results produced. In the cases I have narrated in which recovery ensued, this took the place of all other treatment. Possibly dry cupping to the chest, or the use of Junod's boot, might prove of some service in relieving the circulation.

2. To enjoin the most absolute and complete repose. The object of this is evident. The only chance for the patient seems to be that the vital functions should be carried on until the coagulum has been absorbed, or, at least, until it has been so much lessened in size to admit of blood passing it to the lungs in sufficient quantity. The slightest movement may give rise to a paroxysm of dyspnœa that may prove fatal from the increased supply of oxygenated blood required. It must not be forgot that in a large proportion of cases death immediately followed some exertion, in itself trivial, such as rising out of bed. Too much attention cannot be given to this point; the patient should be absolutely still, she should be fed with an abundance of fluid food, such as milks, strong soups, and the like, and should on no

account be permitted to raise herself in bed, or attempt the slightest muscular exertion. If we are fortunate enough to meet with a case apparently tending to recovery, these precautions should be carried on long after the severity of the symptoms has lessened, for a moment's imprudence may suffice to bring them back in all their original intensity.

Bertin,[1] indeed, recommends a system of treatment very different from this. In the vain hope that the violent efforts induced may cause the displacement of the impacted embolus (to which alone he attributes pulmonary obstruction) he recommends the administration of emetics. Few, I fancy, will be found bold enough to attempt so hazardous a plan of treatment.

Various drugs have suggested in these cases. Richardson recommends ammonia, a deficiency of which in the blood he, at that time, believed to be a chief cause of coagulation. Others have advised the administration of alkalies in the hope that they may favour absorption. The best that can be said for them is, that they are not likely to do much harm.

Dr. Barnes inquired whether the clot had been noticed to be present on the same side to which the placenta was attached. He related a case in which the application of six leeches to the cardiac region had produced marked relief, the patient ultimately recovering.

Mr. Francis Tayler thought that in Dr. Playfair's interesting series of cases three points might be noticed; first, it appeared that the patients were suddenly found to be on the point of death before any danger had been apprehended; secondly, in those cases which were examined after death a firm, laminated clot was discovered, evidently not of very recent formation; and thirdly, I believe, in those cases in which a stethoscopic examination was able to be made some abnormal sound was discovered at the base of the heart. I would suggest, therefore, that if the heart-sounds were subjected to examination during the puerperal period, either as a matter of routine, or, at any rate, more generally than they usually are, in all cases, or at least in those in which thrombosis is prone to occur, for instance,

[1] Op. cit., p. 393.

after hæmorrhage, the danger might in some cases be foreseen, and by suitable treatment be lessened or averted. The following case came not long ago under my notice. A young lady had rather a smart hæmorrhage after her first confinement. Her recovery being considered by her friends to be rather slow, on the eighth day a consultation was held at their request. They were confidently assured that she was doing well, and that no danger was to be apprehended. Within twelve hours of that time, upon her making some slight exertion, she was suddenly seized with the symptoms described by Dr. Playfair, and she rapidly died. A post-mortem examination discovered a firm laminated clot in the pulmonary artery. Had a careful examination of the heart-sounds been made the day before, he (Mr. Tayler) thought it quite possible that some abnormal sound would have been detected which, by leading to the adoption of suitable treatment, might have saved the life of the patient, or at any rate the reputation of the practitioner in the eyes of her friends.

Dr. T. C. Hayes bore testimony to the merits of the paper, and agreed with Dr. Barnes in thinking that its subject was such as to forbid a hurried discussion. He was quite at one with Dr. Playfair in the view that thrombosis had a wider application than was commonly given to it as a cause of disease and of sudden death in puerperal women. He looked upon phlegmasia dolens and ante-mortem plugging of the pulmonary artery as dependent upon the same conditions. In the one case a clot formed in the femoral vein and other vein of the leg, and in the other case a clot was deposited in the trunk and branches of the pulmonary artery, and these clots were produced by the changes wrought in the blood by the pregnant state, or its accidents, such as flooding, septicæmia, &c. To induce clotting in a vein, inflammatory or other changes in its coats were not necessary; indeed, he was of opinion that in most cases, if not in all, such changes were caused secondarily by the clot. Dr. Playfair had not mentioned the sudden paralysis with or without loss of consciousness occurring so frequently during or immediately after pregnancy. Were they not produced in most instances by thrombosis in the cerebral arteries? It was incorrect to suppose that plugging of the pulmonary artery was always brought about by a septic state of the blood. Some time ago Dr. Hayes had seen the lungs of a young unmarried lady who had died of plugging of the pulmonary artery. Up to the onset of the fatal symptoms she seemed in excellent health; a few days before she had heartily enjoyed herself at a large dance. The dyspnœa, &c., came on in the evening, and she died the following morning. This case was seen and diagnosed by Dr. George Johnson.

Dr. Routh stated that Dr. Playfair had passed over, he thought, the earlier inquiries of Dr. B. W. Richardson, who was anterior, in date of notice, to the authors mentioned by Dr. Playfair in his, Dr. Richardson's, researches about clot in the heart. The symptoms of this affection, whether affecting the right or left cavities of the heart, were clearly laid down by Dr. Richardson, as also the deposition of these clots in layers as opposed to the common post-mortem fibrinous coagula. It was manifest in these cases there was a tendency to the deposition of fibrine in certain parts of the blood. Years ago he had heard Dr. C. J. B. Williams point out the acidity of the serum of the abdomen in a case of peritonitis which had died in University College Hospital, and which serum teemed with fibrinous flocculi as if precipitated by the acid serum. The blood to circulate must be *alkaline*, but it was possible that in many of these diseases, accompanied with blood poison, the blood, without being exactly acid, might be less alkaline than normal, or the very increased temperature, usually observed in the early period of these cases, might in measure expel the free ammonia in the blood, and so facilitate the deposition of the fibrine. While it was clear that the ammonia was not the *sole* cause of the solution of the blood, it was a powerful contributory agent to this end. Now, Dr. Richardson had shown that the exhibition of Ammonia, in doses varying from ten to twenty drops of the liquid given in Sugar of Milk, every hour or half hour, had a powerful effect in preventing the formation of clot, and in some cases of dissolving it when formed. Death from clot in the heart was not an unfrequent cause of death after surgical operations in women. Dr. Routh mentioned three cases in which, from the symptoms, no doubt existed as to the presence of clot in the heart. One was a case of *cellulitis* about the uterus. Under the Ammonia treatment all these symptoms disappeared. She died, however, a few days afterwards from rupture of a more internal abscess into the peritoneum. The post-mortem revealed almost entire resolution of the diagnosed clot. In another case the same treatment (combined with raw beef essence and stimulants) resulted in a cure. In a third case of a medical friend affected with erysipelas, and in which death from unmistakable clot of the heart seemed imminent, the Liquor Ammonia treatment proved also successful. The Liquor Ammonia had a great advantage over the carbonate or alkalies generally. These weakened greatly the already exhausted patient, and their elimination was not so rapid. Dr. Richardson had shown that you might push the liquor to complete disintegration almost of the globules of the blood, and yet the suspension of the remedy was almost immediately followed by their reproduction, so that no permanent harm was done. Doubtless its volatility in a

measure contributed to its rapid elimination. The usefulness of this remedy in phlegmasia dolens, however, as well as in the more serious cases of clot in the heart, was at once obvious from the results obtained.

Dr. Savage said that Dr. Playfair's paper on "Thrombosis after Delivery," like all contributions occupying the Secretary a full hour to get through, could not be fairly discussed at a single ordinary meeting of Fellows. However excellent such long papers might be they had the disadvantage of tasking the attention so much so that the train of reasoning connecting the beginning with the end was lost sight of. Thrombosis and embolism, he imagined, had long ago been completely worked out. Would it be too much to expect that Dr. Playfair would, as a favour, point out wherein he considered his views novel or peculiar, thereby saving much waste of time in going over old ground? He proposed that the discussion of the paper should be adjourned to the next meeting.

Dr. Chambers having seconded this, it was resolved by the Society to adjourn the discussion.

Dr. Playfair said that, although the discussion on his paper had been postponed, he should like to answer Dr. Routh's objection that he had not recommended Ammonia as a means of treatment in puerperal thrombosis. He would remind Dr. Routh that Dr. Richardson himself, as well as every one else, had long given up the theory of the coagulation of blood depending on want of alkalinity, and even his theory, of course, to practise based on it fell to the ground. Ammonia might possibly act as a useful diffusible stimulant, but in no other way.

MARCH 4TH, 1874.

EDWARD JOHN TILT, M.D., President, in the chair.

Present—106 Fellows.

The minutes of the preceding meeting were read and confirmed.

Books were presented by Dr. George Johnston, Dr. Oscar Hasse, Dr. V. Saboia, and the Dublin Obstetrical Society.

George C. Briggs, M.R.C.S., and Arthur Nicholson, M.R.C.S., were admitted Fellows of the Society; and James Charlesworth (Hanley) and W. B. Robertson (West Dulwich) were declared admitted.

The election of new Fellows was deferred till the next meeting in April.

The following gentlemen were proposed for election :— A. Mercer Adam, M.D. (Boston); G. Boddaert, M.D. (Ghent); C. M. Crombie, M.B. (Aberdeen); H. H. D. Lewis, M.R.C.S.; Gustav Simon, M.D. (Heidelberg); and A. D. Sinclair, M.D. (Boston, Mass.).

The discussion on Dr. Playfair's paper and on a specimen shown by Dr. Edis having been deferred, the PRESIDENT declared that the meeting was made special, and spoke as follows :

Gentlemen, this is a special meeting called to consider the subject respecting which you have been summoned. Many of those who, like myself, have signed the nomination paper of Mrs. Anderson had no wish that women should form a part of our Society, but they felt that

the question must inevitably come before us sooner or later, and that the question had better be settled in the ordinary way by "yes" or "no" at one of our ordinary meetings. When Mrs. Anderson came to me and presented a paper signed by two good names, I took care to ascertain whether she was prepared for the disagreeable alternative of being black-balled, and I took upon myself to act as a prophet and to tell her that such would inevitably be the case. After more mature consideration I felt that the question was one of too great importance to be tried by an exceptional case; that it was a matter of principle, and ought to be decided upon its own merits, independently of any feeling of respect that we might have for a lady who, by English pluck and perseverance, had actually fought her way not only up to, but into, the Register. I therefore withheld the nomination paper, although it had been signed by many esteemed names, and I submitted the question to a Special Council. The Special Council also felt the importance of the subject, and thought it better to let the Fellows themselves consider the question, to speak upon it and decide it. That being so, the Council issued the circular which you have all received; and now you are called upon to interpret the bye-laws which were framed some thirteen or fourteen years ago. In order that you may know what you are called upon to decide, it will be as well that I read to you the paragraphs in the first and second chapters that bear on the subject you have to discuss. In the third section of the first chapter, it is said "All medical practitioners registered, or, if practising abroad, possessing a British qualification, shall be eligible for election, as Fellows of the Society." Then at Chapter II, the first paragraph runs, "Candidates shall be balloted for, at the meeting following that on which the certificate has been read and suspended. No *gentleman* shall be declared elected, unless two thirds of the votes be in his favour, fifteen Fellows at least being present." Then again the last paragraph of that chapter says, "If any person shall fail to comply with the regulations for the admission of Fellows, within three months

from the time of his election his election shall be void." Now, gentlemen, on the other hand it may be said that if women become medical practitioners and get on the Register, they are entitled to be elected Fellows of this Society, and it might be urged in favour of that being done, that the word "candidate" is a word of indefinite meaning, and may refer to one or both sexes, and that the same thing may be said of the word "person." On the other hand, the word "gentleman" coming after "candidate" in the second paragraph of Chapter II may fairly be taken as an interpretation of what our laws mean. If "candidate" means "gentleman" at paragraph 2, Chapter II, so the same meaning must attach to the other paragraphs. I hope, gentlemen, that in the numerous comments that will be made upon our bye-laws, you will bear in mind that when they were framed, there was no lady on the Register, and it was not supposed that ladies would get on the Register. The framers of our laws only contemplated gentlemen candidates. That is what I ask you to bear in mind. Before opening the discussion it is my duty to give you, as far as I can, the opinion of our esteemed country Fellows upon this important question. Many of them were anxious to be here, but they have been detained by avocations of a pressing nature, as you can easily understand. I am the more desirous to let you know what their feeling is, because I do not consider myself entitled to record their opinions as votes. There might be technical objections to taking their opinions as proxies in the voting. You yourselves will, I am confident, be able to decide the question, but it will be interesting to you to know that the circular that you have received has been answered by ten medical practitioners, eight of whom oppose the admission of women to our Society. Their names are—

A Fellow.—May I say that, unless the votes are to be recorded, I think there is no necessity to mention the names.

The President.—I am in the hands of the Society. I think it would be interesting for the members present to

know the feeling that they express. I do not see why the names should not be given.

A Fellow.—We shall have something to say upon the subject. I hope the names will be given.

A Fellow.—I confess, as one of the original members, I would rather hear the opinion of persons present who have been associated with the Society from its foundation. I would rather hear some of the senior members than hear the names of persons at a distance.

The President.—It will only take two minutes.

A Fellow.—I would rather hear some of the original founders speak before hearing the names of country members, that may be of great or little weight.

A Fellow.—It is always customary at these meetings that letters should be read before the speeches are made.

The President.—I think so, but I am in the hands of the Society. It may be done in a moment, and it will not interfere with the business.

A Fellow.—I cannot imagine what objection there can be to it.

The President.—Nor can I. If the meeting will allow me to do so, I think it will be the best course.

Dr. Murray.—You have said that you would not register the opinions expressed as votes. If you mean to take no notice of the opinions, but merely to read out the names, that can be done.

A Fellow.—I do not think it is for us to decide this way or that. If the chairman desires to read the names, and if it is customary and according to the law and custom, it must be done.

The President.—I do not care in the least about reading the names, but I thought it would be interesting for the town members present, to know what some of the country members feel upon the subject.

A Fellow.—If it is an understood thing that the letters are to be read on both sides—

The President.—No letters are to be read. It will not take two minutes to mention the names. Of the ten gentle-

men who have answered the circular, eight are against the admission of women into this Society. Their names are—Mr. Bland, of Macclesfield, Mr. Clark, of Leamington, Dr. Clay, of Manchester, Mr. Cornwall, of Fairford, Mr. Taylor, of Birmingham, Mr. Thompson, of Nottingham, and Mr. Jay, of Scarborough.

I may say that the last-named gentleman has no objection to the admission of women, provided we find them a separate room where they can hold their discussions, and that they never put their foot into our room, and I think that is one of the most sensible opinions that could be expressed. There are two gentlemen who see no objection to the admission of women, Mr. Jones of Wrexham, and Dr. Harris of Redruth. Now, gentlemen, I have put before you all that I consider necessary to enable you to discuss the question. There is one point that I wish you to bear in mind. This is a numerous meeting, and the subject will interest many of you. I shall feel it my duty to limit each speaker to ten minutes, and I must remind you that it is not customary for a speaker to speak twice on the same subject. I understand that Dr. Murray has a motion to make on the subject, and if he will now make it we shall be in a position to begin the discussion.

Dr. Murray.—I have but very few words to offer to the Society. The simple question for us to settle is whether our laws admit of the nomination of women. That is the matter at issue—whether women should be tolerated here. I must say that I am individually very much against the idea of admitting lady practitioners.

The President.—Perhaps Dr. Murray would move his resolution first.

Dr. Murray.—I will do so if you will allow me to make a very few remarks. The only possible loophole by which women could be admitted for nomination is this. But first of all, let me refer to the paragraph which you, sir, have read, where the word "gentleman" occurs; and then it reads "shall be declared elected unless two thirds of the votes be in *his* favour;" and you will see in a succeeding

paragraph, Chap. V, "*his* name shall be suspended in the meeting room." I think that clearly shows that there was no contemplation of any woman being admitted into our ranks. If Sec. 3, Chap. I, admitted of any doubt, I think it is now removed by the subsequent framing of your laws. I beg now to move, "That the laws of this Society do not admit of the nomination of female practitioners to the Fellowship of the Society."

Dr. SAVAGE.—I second the motion. It seems to me that Dr. Murray has clearly shown that, according to our laws, ladies could not be admitted. I therefore need say no more on the subject.

Dr. STEELE (Liverpool).—It seems to me that the Council have placed the Society in a somewhat difficult position. We are asked to-night to say what is the proper interpretation of our laws. I always thought that when a society was founded, and made its own laws, so far as the interpretation was concerned its responsibility ceased; that it remained for the executive, the President and the Council, to carry out those laws, and not to come back to the Society and say, "Gentlemen, what is the interpretation of your laws?" But the question has been brought before us, and as it is a very important question, we must deal with it fairly and thoroughly. Now, although I entirely agree with Dr. Murray as to the admission of women, I cannot agree with his interpretation of the law. It appears to me to be perfectly beyond controversy, if your statutes say that every medical practitioner shall be eligible as a Fellow of the Society, that if Mrs. Garrett Anderson is a medical practitioner, she is clearly eligible for admission here. As to the gender of the pronouns that follow, is it to be supposed that such a matter as that can overrule the principle that you will admit for nomination every qualified practitioner? But the fact of nomination is one thing, and the fact of admission is another. If Mrs. Garrett Anderson or Mrs. Anybodyelse be nominated, she will have to run the gauntlet of the ballot, and she will not be elected a Fellow of the Society unless she has the required majority of votes. We cannot

altogether evade the general principle—that is my view. To me the law is perfectly clear, and I submit that you cannot refuse to receive the nomination of any qualified practitioner. With regard to the policy of admitting ladies as members of this Society, that, of course, is a different question. I have endeavoured to make myself acquainted, as far as I could, with the feeling of my professional brethren in the provinces on that point, and it seems to me to amount to this—that it would be most undesirable that ladies should become members of the medical profession in any numbers. We think it extremely unlikely that that will ever be the case, and we think that the best mode of discouraging it will be, not to offer any opposition to any individual cases, but if any lady properly qualified comes here properly nominated, let her run the gauntlet of the ballot. Individually, I should be very much disposed to vote for the admission of a lady, especially for Mrs. Garrett Anderson, because we know that she is exceptionally qualified, that she has exceptional qualifications for carrying on the profession. When we meet with a Joan of Arc, or a Maid of Saragossa, or a Grace Darling, we recognise their courage and their ability, but in doing that we do not say that we wish to throw open the army and navy to women. And so when an extraordinary case comes before us, an exceptional case which proves the rule that the female sex are not adapted for the profession, I do not know whether we should not be adopting a wise policy in accepting them and admitting them to our Society. I am afraid that the Society will subject itself to some severe criticism if we decide that we cannot allow a female to be nominated as a member when our laws tell us that every qualified practitioner is eligible.

The PRESIDENT.—Allow me to remind you that the very nomination concedes the principle. That is why I withheld the paper, because on studying the bye-laws I had doubts whether we had a right to nominate. If the meeting decides that the bye-laws mean women as well as men, then only will it be right to nominate, then only will Mrs. Ander-

son's nomination be worth anything more than the paper on which it is written. I hope it will be borne in mind that the nomination concedes the principle. You are asked by Dr. Steele whether the bye-laws justify that.

Dr. Cleveland.—The question is simply as to the interpretation of the bye-law. It seems to me as clear as possible that when the bye-law was formed it was never contemplated to admit women into the Society. If such had been the intention it would have been expressed very differently. We must now, after the lapse of fourteen years, take the spirit as well as the letter of the bye-law; and taking the spirit of it, it seems to me as clear as possible that it was never contemplated to admit women. The whole question of nomination hangs upon this. It is surprising to me how the bye-law can be interpreted in any other way than that which I have mentioned.

Dr. Wynn Williams.—I go further than that, and I say that the framers of the bye-law could not have intended that women should be admitted, for there were no women on the Register, neither were there any means by which they could get on the Register. Mrs. Anderson has managed—I admire her spirit—to get on the Register; but no other woman can get on the Register until the medical laws are altered. It is necessary that they should attend lectures in the usual way. Mrs. Anderson did not attend lectures, but somehow or other she got smuggled through Apothecaries' Hall. That cannot happen again, and until the laws of medical education are altered women cannot be put upon the Register. There is but one woman on now, and she was not on then.

Dr. Graily Hewitt.—As one of the original Secretaries of this Society, who assisted in the construction of these laws in the first instance, it may, perhaps, be as well that I should say a few words upon the subject. It is certainly a fact that those who framed the laws of the Society never for an instant anticipated the admission of women into the Society. I do not think that the matter was even the subject of deliberation, or that it was even mentioned on any one occasion, in the deliberations which took place

in respect to the formation of the laws. I agree with what Dr. Cleveland has said, that we must look, not simply to the wording, but to the spirit of the laws. I say nothing as to the personal merits of the lady who has been the means of originating this discussion, but I do say that when the Obstetrical Society was formed, I do not think it was ever intended to admit ladies into the Society.

Dr. Squire.—I understood that we were invited to consider, not what the law literally meant, but what was the intention of the founders of the Society in drawing up this law. I am glad to hear from the gentleman who was Secretary at that time, such an authoritative statement of what the intention was when the laws were formed. As to the literal wording of the law, it seems to me that a slight error has been made in considering that the word used in the first sentence is quite as general as "candidate." Candidate, we know, can be masculine or feminine. The only word I know that is like it in the English language is "probationer." "Probationer" certainly is meant for males only; it is used in reference to monastic orders, and "novitiate" or "novice" is used for the other sex. If we are to have female medical practitioners, some other word had better be invented by the time that state of things arrives. I maintain that the word "candidate," by a forced departure from its usual meaning, does not, even in its literal sense, mean that women are to be admitted as members of this Society.

Dr. H. Smith.—There are two points before us, the letter and the spirit of the law. With regard to the letter we have to consider whether the regulation allows simple nomination. With regard to the spirit the question is as to the admission of women altogether. Now, though I am not in favour of the admission of women into the Society, there seems not to be the least reason why there should not be a nomination. It is all very well to say that the founders did not contemplate the admission of women. The thing was not contemplated by the profession generally. The word "candidate" or "practitioner" would admit both sexes; and I do not think that the use of the word "gentleman," or "person," or

"his," will in the least militate against that. We know how the word is used in all documents. Even in one's early grammar, we find that the male gender is more worthy than the feminine, and the feminine than the neuter. For the sake of convenience one pronoun is used, and in all documents, the masculine word would be used in reference to what has gone before. Therefore it seems to me that there is not the least reason why a nomination should not be allowed. With regard to the principle, it is true there is only one person yet able to be admitted, but we know not what steps may be taken within a year or two; therefore I think we ought to embrace the present opportunity to discuss the whole matter. As to the admission of women the difficulty would be this. It is quite a different thing from the women meeting by themselves in an Obstetrical Society of their own. In a meeting like this one can imagine subjects being brought forward for discussion, when, though the women might not feel the objection, many of the members would not like to be present. As to the interpretation of the law, I do not see any reason why, simply because the male pronoun is used, Mrs. Garrett Anderson should not be nominated; at the same time I think the spirit of the Society is against the admission of women.

Dr. Godson.—The last speaker has said that the male is more worthy than the female, and the female than the neuter. I should like to know whether he refers to the English, Latin, or French grammar. I remember it in my Latin grammar, but not in my English.

Mr. J. Scott.—I think in all legal documents where it is intended to specify both sexes the words "he or she" or "him or her" are invariably used, so that no mistake can possibly arise. Looking at our rules, they could not have anticipated a state of things which did not exist. At that time there were no she-doctors to legislate for. The rules could not be applied by any strained interpretration to a state of things which did not then exist. Such a thing was never then contemplated.

Dr. Aveling.—I think if the Fellows desire that women

should enter our Society the bye-laws may be interpreted so as to admit of it. The British and British Medical Associations framed laws long before we did, and they found no difficulty in interpreting their laws, so as to admit Mrs. Garrett Anderson as one of their members, and on the nomination of some of the best members of our profession. I am not standing up to plead the cause of women as obstetricians, because I think, if there is one occupation for which they are less fitted than another, it is that of attending the emergencies of obstetric practice. At the same time, having a personal knowledge of Mrs. Garrett Anderson, I was induced to sign her nomination paper, knowing that she is the only medical woman in England, and that it is probable she will remain so, and knowing also that she would not obtrude herself upon the Society, when papers were likely to be read, during the reading of which her absence would perhaps be an advantage. Under these feelings I was led to sign her nomination paper. My friend Dr. Murray takes a broader view of the question, and in a very determined manner puts it upon the admission of women into the Society. I think that question might be put off a short time, and until women actually exist we might have dealt with the one. As the broad principle is raised I shall certainly vote against women being admitted to the Society, but if it had been simply the question of the admission of Mrs. Anderson I should have voted in its favour.

Dr. Routh.—As I read the circular put into our hands, the true question to be submitted to the special meeting is, what shall be "the proper interpretation of the actual bye-laws and regulations;" but it is added, "or so to alter the bye-laws and regulations as to express clearly the intention of the Society as to the admission of women." I presume if anybody in this room is disposed to move that these bye-laws should be so far modified as to admit women, he could do so.

The President.—Yes, of course.

Dr. Routh.—According to the statement put forward by

Dr. Murray, it would imply that we are come here merely to put an interpretation upon the laws.

The PRESIDENT.—No, it does not; if I correctly understood Dr. Murray, he did not mean that at all. He proposed a motion to the effect that our bye-laws do not admit the nomination of female practitioners. It is open for you or any other gentleman to propose that they do, and then the sense of the meeting will be taken. If anybody likes to move an amendment that women are admissible let it be done.

Dr. ROUTH.—I understood that resolution as a definite statement that our laws mean a certain thing. If it were merely a question on that point, I should be disposed to doubt it, and I put it to any members of the Society, supposing any one was to make a will, and in that will was to use the term to his "heirs, executors, administrators," &c., and there happened to be no males, would not it go to the females? Indubitably it would. Therefore I think Dr. Heywood Smith is quite right as to the meaning of the word "his,"—that it indubitably includes the female. I for one have not that fear which seems to have pervaded a part or the whole of the profession, that women, if they are admitted, will supersede us. There seems to be a fear of women being brought in. Is it so or is it not? (No, no.) I noticed that Dr. Aveling thought women were quite incompetent, from their physical condition, to perform difficult obstetric operations, and I see, when I look over to France, that out of the large array of women who can be there brought forward, there are just two who are able to compete with men. As far as that position goes, I must confess I have not the slightest fear on the point. I do not think the women of England themselves—that is my experience of them—will go to female practitioners, when they can get male practitioners, and therefore, as far as that question is concerned, I really have not the slightest fear whatsoever as to the position which they will take; they will altogether occupy a secondary position. I do not know whether it is wise to bring forward this resolution, to the effect that women should be admitted. I for one would not do it, simply

because I know the feeling of the members of the profession against it. I signed that paper of Mrs. Garrett Anderson's because I believe she is a talented woman, and is as perfectly conversant as many of us, with the branches of her profession. Although I could not refuse to sign the paper I was perfectly certain if her name was proposed in the Society she would be black-balled, and therefore I should be very sorry to make any modification in this law. The only point I wished to raise was this. It appeared to me that we were in error in giving too exact and definite an interpretation to these bye-laws, because circumstances might alter at some future time. Remember we ourselves stand up for the education of women; we want to make a class of educated women, who, perhaps, at a subsequent time we might be willing to admit as associates.

Dr. GALTON.—There is but one way to bring this matter fairly and decisively to an issue, and that is by some member of this Society proposing that the bye-laws be so altered as to admit women. I myself will propose that the bye-laws be so altered as to permit the admission of women into this Society, and I do so on this ground. I think we have hitherto been discussing the letter and not the spirit of this Society. We have been discussing the interpretation of bye-laws, and not really the very *raison d'être* of the Society, which is the advancement of the art of obstetric medicine. If that art of obstetric medicine can be shown to be possibly advanced by the admission of women within these walls, it surely is our duty, acting in the interests of this Society, not to exclude them by any decisive vote on this occasion. That it may so benefit the Society and further the immediate end of this Society I think has already been shown by the existence of the French ladies, whom Dr. Routh has instanced. That it might not have done so when these bye-laws were framed is true, because no women were then registered medical practitioners. Why do we confine the admission of Fellows to the list of registered medical practitioners? It is because, as I imagine, we want some guarantee that the observations which are brought before this Society by those

Fellows shall have been founded on some experience, and some education, specially in disease. One lady has already become a registered medical practitioner, and the question hinges upon her admission. I think that this question is really a very great one, and it is one which we ought not to decide hastily. The progress already made for some years in these matters has been steady and uniform. I do not mean with reference to the admission of women into the profession. I hold the opinion that women are unfit for the profession; but having women already in the profession, and the probability being that we shall have more, should we not be excluding one great means of advancement of the obstetric art by the exclusion of those who have the opportunity, the ability, and the power, to make observations which might redound to the credit of our Society? If we, for instance, had an English Madame Boivin, how could we possibly exclude her from this Society? Would it not be a loss and a reproach to the Society to exclude such a woman? By voting in favour of this amendment we do not express any opinion upon the desirability of women engaging, as a general rule, in the practice of the obstetric art; we are dealing with those who are already medical practitioners, they must be in a position, not only to make observations, but being in practice they will have the power possibly of bringing before the Society some cases of interest which may occur to them and not to other members of the Society, and we shall be shutting out from ourselves a source of great benefit and advantage to the Society. I therefore propose that the bye-laws be so altered as to admit of the admission of women.

The PRESIDENT.—Or that the bye-laws be so understood as to admit; that would be the same thing.

Dr. GALTON.—I think the interpretation of the bye-laws refers to the subsequent expression of "gentleman" and "him" and "his," and in order to avoid all misconception it would be better to alter the laws.

A FELLOW.—I think there is a motion before the meeting at present. Are you going to take the sense of the meeting on that motion or on the amendment?

The PRESIDENT.—This is the amendment; I was going to ask if anybody seconds it.

Dr. WYNN WILLIAMS.—This is hardly an amendment on the previous motion, which is whether women are to be admitted.

The PRESIDENT.—If that is the case I should suggest to Dr. Galton to make his proposition an amendment to the motion moved and seconded.

Dr. GALTON.—I proposed that to be an amendment.

Dr. WYNN WILLIAMS.—It is not an amendment, it has nothing to do with the previous question. The previous question is to decide, as I read it, whether they are admitted on the present laws, not to alter them.

The PRESIDENT.—This is the motion before the meeting: —"That the bye-laws of the Society do not admit of the nomination of female practitioners to the Fellowship of the Society."

Dr. W. WILLIAMS.—Exactly so.

The PRESIDENT.—Excuse me one moment. If Dr. Galton will move as an amendment that the bye-laws of the Society admit of the nomination of female practitioners it will express his views and be perfectly in order.

Dr. STEELE.—I ask for information. Am I to understand from what is going on this evening, that the interpretation of the laws of this Society is to be turned first one way and then another, according to the resolutions and amendments of meetings? Surely the bye-laws are before us.

The PRESIDENT.—No, you have the letter before us.

Dr. STEELE.—It seems to me a very dangerous precedent.

The PRESIDENT.—If it is a novel thing for Dr. Steele to learn that the letter of a law may not explain itself, you have only to look to our courts of law, and you have only to appeal to a far nobler code of laws, the written words of the Bible, which are interpreted in different senses, by I do not know how many people. It is necessary to interpret our bye-laws; it would be easily done by "yes" or "no" to the amendment that is now being moved and to the motion that has already been moved.

Dr. MURRAY.—As mover of that resolution may I make

one observation? It is simply that I have brought forward a resolution to the effect that we consider that the bye-law which we have been called upon to think over does not admit of the admission of women. I think if you will put that to the vote, and the Fellows present do not carry it, that it will mean the reverse.

The PRESIDENT.—Yes, it would.

Dr. MURRAY.—I do not think any amendment is necessary. The question is simply as to our interpretation of this bye-law, and if we do not agree as to its meaning that women are not eligible for the Fellowship of this Society, then it is for us to frame another law in accordance with that determination. The case before us is simply to be taken by a vote.

The PRESIDENT.—Whenever a motion is moved I believe it is optional for anybody to move an amendment, and the amendment is taken first.

Dr. SQUIRE.—That is not an amendment. If the motion is lost then comes the time for Dr. Galton's amendment.

The PRESIDENT.—You know the motion of Dr. Murray. It is now proposed, and I must consider it an amendment, that the bye-laws be understood to admit the admission of women to the Obstetrical Society.

Dr. SAVAGE.—I really cannot understand the arguments that have been adduced; they are perfectly unintelligible. We are told by the gentleman who proposes the amendment that there would be a great loss of obstetric knowledge if women are excluded; and then we are told by another gentleman that he would not trust them with a severe case of midwifery on any consideration. What can we hope with regard to the advance of obstetric knowledge by the occasion of ladies?

The PRESIDENT.—You have already spoken on the subject.

Dr. SAVAGE.—Would Dr. Galton explain the amendment, for I do not understand it?

Dr. WYNN WILLIAMS.—It should come on after the motion is decided, not as an amendment, but as a second question.

Dr. CHARLES TAYLOR.—May I ask if the amendment has been seconded?

The PRESIDENT.—No. You thoroughly understand the motion of Dr. Murray; it is simply this—it is to say that our bye-laws do not allow us to admit women. Now, the gentleman who has placed this paper in my hands moves as an amendment that our bye-laws do admit women.

Dr. GALTON.—No.

The PRESIDENT.—That is the pith of what you say. Has anybody seconded it?

Dr. SQUIRE.—You cannot entertain it until it is seconded.

The PRESIDENT.—I have not yet been allowed to seek for a seconder. I ask if any member is willing to second the proposition of Dr. Galton?

Mr. KISCH.—I beg to second the amendment before the meeting. I am aware that it will be lost by an overwhelming majority.

Dr. SQUIRE.—Those were not the words moved by Dr. Galton; it was that the law should be altered.

The PRESIDENT.—Dr. Galton has assented to the alteration I suggested.

Dr. SQUIRE.—It was a suggestion of your own, not of Dr. Galton.

The PRESIDENT.—It was a suggestion for his acceptance.

Mr. KISCH.—I am aware that this amendment must be lost in the present temper of the Society by a very large majority, but I am sure, when the members come to consider the matter some years hence, when the existence of female practitioners will have been confirmed, it will be considered a discredit that the Society should have admitted that subjects are discussed here, in such a manner as that they could not be so discussed before other persons. ("Question.") As to the spirit of the bye-laws, it is clear that as the existence of female practitioners was not contemplated when the Society was founded; it is merely a verbal quibble, and nothing more, to say that because the word "his" occurs the spirit of the Society is against the admission of women. It is

quite clear the thing was never brought before the Society at all.

Dr. H. Smith.—I wish to explain, with reference to the immense majority expected to overwhelm this amendment, that the question of the advisability of admitting women as Fellows is not in the least before the Society; it is simply as to the interpretation of the bye-laws, whether it is possible that the bye-laws could be so interpreted as to admit them.

Dr. Charles Taylor.—As one of the original members of the Society, many years since, I think it is a very fortunate circumstance that Dr. Galton has given us an opportunity of hearing an amendment put to that motion. From what he has said I gather that when it is put to the vote, he will vote against his own amendment, as he speaks strongly against the admission of lady practitioners as Fellows of this Society. It appears to me that those who have spoken are pretty well unanimous in their opinion with regard to this, and I think the original members certainly are also unanimous. When the Society was established we did not anticipate the pleasure of having ladies coming among us, or the unpleasantness of their presence either. I think we all agree to that, and the gentleman is a very bold man who comes forward with the opinions that he has enunciated, almost saying that he decidedly is of a contrary opinion. I think it is a great thing for this Society that this matter should be brought forward and finally settled. We, I believe, are almost unanimously of opinion that our bye-laws do not admit, and were never intended to admit, lady Fellows of this Society. Let that be once settled, and we shall never have them again offering themselves as Fellows, or even to be nominated by those gentlemen who are so polite as to have the ladies cause at heart. I think there is very little doubt about that. This amendment is sure to be lost, and the original motion is sure to be carried. Then it appears to me, if there should be any further doubt about it, the best thing will be so to frame the laws, or alter them, as to show that the admission of ladies is quite out of the question. I have mentioned the matter to several friends, Fellows of this

Society, and to other medical men, and the universal opinion is that the Society would be very greatly damaged if we admitted lady Fellows. I believe a large number of men, pleased as we are to meet the ladies upon other occasions, would be anything but pleased to meet them here, and that they would decidedly withdraw from the Society.

Dr. Wiltshire.—Dr. Taylor has hit the pith of this matter. We are not to consider Mrs. Garrett Anderson's interests, excellent and clever woman though she may be, but the interests of this Society, and I may venture to say in the interests of this Society her election would be ruinous. If Mrs. Anderson were elected I do not hesitate to say, from the opinions expressed to me by a great many of the Fellows, that there would be a very large secession of members, and that would be very damaging to obstetrics ; and as we neither want to damage obstetrics nor this Society, I think the best thing we can do in the matter will be so to amend our laws, if they require amendment, or so to interpret them, that the possibility of ladies being nominated as Fellows of this Society shall not occur again. The introduction of one lady, and it is said that there is only one, might be a questionable benefit to herself, but it would be an unquestionable damage to the Society, and if we are interested in the Society and in obstetrics the best thing we can do is to exclude the admission of women altogether.

The amendment was then put and lost, only four hands being held up in its favour.

The original motion was put and carried with but one dissentient.

The President.—You understand how the question has been decided, and I can congratulate you upon the business having been so quietly and so admirably disposed of.

APRIL 1st, 1874.

Edward John Tilt, M.D., President, in the chair.

Present—33 Fellows and 3 visitors.

Books were presented by Mr. Thomas Taylor, Dr. Fordyce Barker, Dr. Corradi, Dr. Oscar Hasse, Dr. Spiegelberg, and Dr. Verardini.

The following gentlemen were elected Fellows of the Society:

A. M. Adams, M.D. (Boston); Oliver Barber, M.R.C.S. (Sheffield); G. Boddaert, M.D. (Ghent); C. M. Crombie, M.B. (Aberdeen); Robert M. Fraser, L.R.C.P. Ed. (Darlington); John Thomas Jones, M.R.C.S. (Llanfyllin); H. H. Dendy Lewis, M.R.C.S.; John H. McCallum, M.B. (Toronto); Gustav Simon, M.D. (Heidelberg); Alex. D. Sinclair, M.D. (Boston, U.S.); and Stephen Skinner, M.B. (Clevedon).

A. S. Galabin, M.D.; A. B. Hopkins, M.R.C.S.; Geo. Alex. Simpson, M.D.; and Reuben T. Warn, M.R.C.S., were proposed for election.

Mr. G. F. Butler Willing (by Dr. Edis) exhibited a five and a half months' fœtus. The mother is a healthy young woman, who has been married nearly three years; has one child very healthy. She calculated having gone five months and ten days with this child from her last catamenial period. She says she first felt the movements or quickening about three weeks previous. I saw her on the morning of the 4th

February, when she was quite well, but told me she had a fall a week previously. In the afternoon of the same day she felt some sharp pains. Before she could well get upstairs on the bed this child, or fœtus, was born, at 4 p.m. Immediately it was born it cried so loudly that it was heard distinctly downstairs and continued at intervals to cry as loudly as a full-grown infant; it was fed by the spoon with gruel, which it took without any trouble, but it could never be got warm; indeed, it was almost stone cold. It passed meconium, but no urine. Eyelids perfectly closed; its weight was just one pound and a quarter, length from head to foot eleven inches.

In all my practice, of over twenty-five years, I have never met with a similar case, although I have attended between 2000 and 3000 cases. I find that there have been cases of six months' children living recorded, but none of five months. I shall be glad to know the opinion of the Society respecting it. It lived just forty-four hours.

Dr. Barnes alluded to his previous researches, where, on examining the lungs, although the children had cried, the lungs sank in water. The air-cells were not properly developed, and the children were not viable. A child had potential life, but must breathe to be alive.

Dr. Heywood Smith said that he had a case under his care in the Hospital for Women, two years ago, where there was pregnancy coexisting with carcinoma of the cervix, and in which, owing to labour coming on about the fourth month, he had to turn and deliver. In that case the child was born alive, and lived in cotton wool before a good fire for some hours.

He could not agree with Dr. Barnes that the question of viability at so early an age was unimportant, for if ever a case should arise at law of sufficient weight doubtless some Fellows of the Society would be called to give evidence as experts, therefore every case that threw any light on the earliest possible time at which a child could be born alive should be considered important to the Society.

Dr. Wynn Williams related a case occurring in his practice where an infant of about five months' gestation had cried after birth, and then died shortly afterwards, and in which case he had given a certificate of still-birth, knowing the infant not to be viable.

Dr. Savage doubted if a child could cry without breathing.

Dr. PLAYFAIR thought there must be air to produce a cry. He alluded to the case of Mungo Park, the celebrated traveller, who performed craniotomy on a child which survived.

Dr. COOPER ROSE remarked that a simple effort at respiration, resulting in a sound resembling a cry, could hardly be accepted as evidence of a living child, and he instanced a case of craniotomy occurring in his presence where the brain was utterly destroyed and yet an effort to cry was made after birth in consequence of the medulla oblongata not having been disorganized. Surely, he remarked, in such a case no one would certify to the birth of a living infant!

Dr. ROUTH said that the specimen before them was one of interest chiefly as bearing on the question of viability, but he could not doubt that if a child had cried lustily it must have lived, and therefore he could not, to save a poor person expense, agree with Dr. Williams that it should be returned as still-born. It might not be viable, but it was alive, and by English law that was sufficient to prove right of inheritance; indeed, he believed there was a case in law in which a child moved distinctly after birth, yet showed no other signs of life, and yet which was adjudged alive, and the father became consequently seized by right of inheritance of considerable property. Moreover, the Society might remember a case he (Dr. Routh) had brought before the Society, of a child of five and a half months, born thus early and prematurely, which had lived eighteen days, but died then of atrophy. The body, he believed, was in the Society's museum. Now, what number of days were to determine life? It appeared to him, although, as in his case, viability was impossible, if a child only lived a minute it could not be returned as still-born. It was only a question of degree after all. Dr. Barnes had stated the lungs in many of these cases of alleged crying were found to sink in water, showing the child had never properly breathed. It would be interesting if a committee could report on this case and ascertain this point as well as the exact age of the child.

The PRESIDENT suggested that Dr. Routh and Dr. Savage should examine and report upon the specimen.

Mr. STEWART exhibited a night-dress designed on Dr. R. Barnes's suggestions for ladies during child-birth and after, where frequent changes of it are necessary without raising the patient. It is entirely open at the back and closed in the front, excepting apertures at each breast.

The patient being on her back, both sleeves are drawn on the sides, being then tucked under without moving her; each

side of the patient being then slightly turned, the back is easily buttoned from top to bottom. The makers of it are Messrs. Burden and Keen, 51, Conduit Street.

Mr. Stewart also showed a legging for varicose veins, substituting for the elastic a rigid material, cool and washable, uniform in pressure. He applies the same principle in all cases of local pressure and general support to the abdomen.

Mr. H. W. Liddard, L.R.C.P., introduced by Dr. A. Meadows, exhibited an inhaler for chloroform alone, or in combination with alcohol or æther. It is cylindrical in shape, and divided into two chambers; by means of a revolving band, which opens or closes the holes admitting air to the chambers, the proportion of chloroform vapour inspired by the patient can be estimated and regulated. In midwifery, by first setting it to the required strength, it can be safely entrusted to the nurse.

Dr. Wiltshire showed some protected perforators which he had devised. They were modifications of Oldham's and Simpson's perforators, each being furnished with a guard or sheath completely covering the point and blade of the instrument. An instrument so protected could be introduced into and withdrawn from the vagina without the slightest risk of injury to the maternal parts, the guard being only withdrawn when the fœtal head was reached, and after perforation being restored before withdrawal, so as completely to obviate the possibility of injury to the mother. The instruments were quite powerful, though considerably lighter than the unprotected perforators now in use, and they could readily be cleaned, the guard being movable.

With regard to the question of straight or curved points in perforators, Dr. Heywood Smith gave the decided preference to those with curved points. In easy cases it was not of much moment, but in some cases of difficulty the curve might be found of great service. The last case he was called upon to perform cephalotripsy in was where the body had been born, and the only available point for perforation was a small portion just above the spine, and in that case the curve was of great use.

PUERPERAL THROMBOSIS.

The adjourned discussion on Dr. Playfair's paper on "Puerperal Thrombosis" then took place. A short abstract was read, briefly referring to the principal points of interest.

The President referred briefly to the previous speakers' remarks, and cited the clinical history of a case in Dr. Fordyce Barker's work on 'Puerperal Diseases.'

Dr. Savage said he had been an attentive listener to Dr. Playfair's paper; he believed he had heard every word of it. At the moment he failed to discover anything which had not been discussed and recorded over and over again, but did not then like to speak under that impression. On reconsideration he thought ten minutes with any good modern book on the subject would furnish the contents of the paper and something more. He should regret having moved for the adjournment if the discussion must be limited to puerperal phenomena. The subject was a wide one, and could not, with profit, be partially entertained. Dr. Playfair appeared to desire his contribution should be regarded as a logical demonstration. He proposes "to take us with him" over certain data or premises to some conclusion not hitherto revealed. When the issue really is so, a paper wanting in originality need not be so entirely disappointing; in this case the conclusion was more ancient than the premises, which turned out, therefore, to be only so much unprofitable recapitulation. Thrombosis, embolism, and Virchow, were, of course, inseparable, but as he appears in Dr. Playfair's paper Virchow would not know himself. The gem of his doctrine was altogether omitted. Emboli, Virchow says, except under special circumstances, do not come from the primary thrombus, because it entirely stops the blood stream; but should it project, as it often does, into a larger vein, of which it is a branch, the blood stream through the latter rapidly deposits upon it a succession of thrombic layers; from this secondary thrombus the embolic particles are

derived; they are, in fact, carried on with the blood stream to the right heart and so on to the pulmonary artery and its primary branches, with the usual now well-known consequences. Dr. Playfair, however, is in antagonism with Virchow; he has, after much research, traced out twenty-five cases of pulmonary embolism, ten of which were not peripheral, but he omits all mention of the multitude of Virchow's cases proving the prevalence of this source of the disorder. In the years 1855 and '56 Virchow, owing to a puerperal epidemic which lasted quite a year and a half, had under his immediate notice a multitude of fatal cases; in every one of these attended by pulmonary embolic complications he found pelvic venous thrombus more or less. Moreover, the character of the embolic particles in the pulmonary artery always corresponded *exactly* with that of the pelvic thrombus. By way of crucial test particles of brain and other substances were introduced into the jugular veins. The same substances composed the emboli subsequently found in the pulmonary arteries. A secondary thrombus as large as the thumb may be derived, says Virchow, from a primary thrombus in a vein no larger than a knitting needle. Dr. Playfair's ten exceptions may, after all, have been peripheral, with the primary thrombus overlooked. It might be said, even so, the secondary thrombus would scarcely have escaped observation, but the latter might get loose and pass bodily up the vena cava. The result of a recent railway accident would argue for this possibility. The subject of the injury died rather suddenly forty-eight hours afterwards; a piece of crushed liver was found blocking up the pulmonary artery. The peripheral production of pulmonic emboli need not be a slow process, as stated in the paper; an idea that it must be slow seems at the root of Dr. Playfair's chief difficulties, assuming that his cases were really thrombic, a conclusion by no means well warranted and not at all in accordance with the necessary import of dyspnœa in the eyes of the experienced practitioner. But Virchow does not assert that pulmonary embolism must have a peripheral origin; any of the few minor cardiac veins opening into the

right auricle may be the seat of the primary thrombus and give rise to a large secondary thrombus within the auricle; nor does his doctrine exclude primary heart thrombi, such as have been recognised from the time of Dioscorides, and for the last half century distinguished in text-books as post-mortem, in-articulo, and ante-mortem thrombi, the latter agreeing with the false polypi of Laennec. The Germans say we delight ourselves in their old clothes, a pleasantry pointing to discussions on allied subjects in other places. Dr. Playfair has assigned a garment from Virchow's wardrobe to Professor Humphry's, a mistake impossible after a mere glance at the writings of the former, the influence of the dichotomous branchings of the pulmonary artery in catching and retaining migratory emboli, the differences between pulmonary emboli and emboli in other viscera coming from the left heart, &c., being there figured and made as plainly evident as noon-day. Phlegmasia dolens Dr. Playfair considers as "correlated," that is, it comes under the thrombic class of affections. This precisely was the view of it taken by Davis in 1822, and more emphatically established by Robert Lee some years after. That pathology of it has stood its ground ever since. How comes it that septic and non-septic uterine venous thromboses are excluded from this "correlation"? Of the two latter Dr. Playfair says not a word. Surely in a paper which took a whole hour to get through some notice might be expected to be taken as to the rarity of pulmonic complication with phlegmasia dolens, the frequency of it in the worst forms of septic uterine thrombus, and the liability to ordinary pulmonic embolism in non-septic uterine thrombus. I for one feel more than curious to hear Dr. Playfair's explanation of these differences peculiar to diseases which most of all worry the obstetric practitioner. There is another point which for a long time perplexed the Germans, and not yet, perhaps, entirely cleared up, viz. the invariable congestion of the pulmonary arteries and capillaries on the distal side of the embolic plug or plugs. Is Dr. Playfair satisfied with Ludwig's explanation? The

disappointment left on the minds of those who heard the paper read was not due to the reader. The fact was it was overweighted with arguments which had long ago served their purpose, and it was not to be expected out of their mere revival even Dr. Playfair could bring forth anything new.

Dr. MADGE observed that, although he had attended 3000 cases of midwifery, he had never met with one of thrombosis.

Dr. RICHARDSON, who had been invited by the President to take part in the discussion, commenced by expressing his thanks to the President and to Dr. Wiltshire for the kindness that had prompted so pleasing an invitation. He also tended his thanks for the friendly and able manner in which Dr. Routh had mentioned him and his early labours at the previous meeting of the Society. He then proceeded to vindicate the English school of medicine for the advancements it has made in the knowledge of this subject of separation of fibrine in the body during life. The study was as essentially English as was the discovery of the circulation of the blood, of which, indeed, this was but a corollary. This position was briefly but favorably maintained by reference to the different authors who, commencing with William Gould, in 1684, had continued the study up to the present day. Referring to his own observations, which were first brought before the Medical Society of London in the session of 1850-51, and which had been followed up to the present time, Dr. Richardson described from his experience the conditions that lead to separation of fibrine within the circulatory channels during life, especially the two conditions of cachectic pyrexia and acute pyrexia. The physical qualities of the fibrinous separation, in respect to the amount of water connected with its mass, was considered, and was shown to be variable in amount in different cases to the extent of from three to thirty per cent. The cause of the separation of fibrine was noticed as a disturbance in the relations which naturally subsist between the fibrine and the water of the blood, a disturbance that may be excited

by increase of water and by increment of heat in the blood. Whatever leads to these two conditions favours the process of separation, and when, in addition, there is obstruction to the due course of the blood so that there is friction of blood at some particular point, the separation is all but inevitable. The action of an organic or septic poison may produce conditions that lead to separation, but the same conditions—as he, the speaker, had shown experimentally in 1854 — may be induced by other causes and with the same secondary results, viz. the separation of fibrine. From the author's experience of cases of separations of fibrine in the human subject he estimated that the separation occurred on the venous side of the circulation in not less than six cases to one in the arterial. After describing the different forms of separated fibrine found in the venous system, in the heart, and in the pulmonary artery, viz. the solid cylinder, the spiral cylinder, the hollow cylinder, the layer or false lining, the irregular mass loose or moulded to the part from which it was taken, Dr. Richardson maintained still the view he has held all through the course of his labours, that, as a rule, the separation takes place on the venous side, at the spot where it is found. In the numerous inspections he had made of fibrine separated in the pulmonary artery, after deaths by surgical fever, pneumonia, the puerperal state, and various other forms of death, he had not in a single instance been able to come to the conclusion that the fibrinous mass had been carried from a distant part of the venous circuit. On the contrary, he had always discovered the clearest evidence of formation *in sitú*. He had found in some instances separations in other parts of the venous circuit—he had seen such a case within the last few weeks — but these separations were coincidental, they too were formed at the places where they were found, and they indicated only a general condition of blood favorable to separation. On the question of diagnosis of separations of fibrine in the pulmonary artery and in the venous circuit Dr. Richardson entered into careful detail. He fully defined a class of cases in which the symptoms of separation were

simulated, and afterwards the symptoms, general and physical, that led to an absolute diagnosis. The mode in which cases terminate when the obstructing fibrine is on the right side of the heart and in the pulmonary artery is varied. Unfortunately it is almost always and at once fatal, but he had records of other modes of termination; one in which the obstruction produced œdema of the lower extremities and a lingering death; others in which the separated substance was retained in the heart for a long period of time, killing at last suddenly by obstruction to the course of the blood. Lastly, in three cases he had seen what he believed was actual recovery by the resolution of the separated fibrine. In concluding his observations Dr. Richardson dwelt on the subject of treatment. Opium, excess of wine or brandy, and movement of the body, he held to be injurious and even dangerous methods of treatment. The treatment he pursued was to maintain perfect rest of the body in the recumbent position, to reduce the temperature by iced drinks, and to sustain by milk and soda water. Medicinally, he administers ammonia in ice water until it suspends the coagulability of the blood, and he keeps this action up by large and frequently repeated doses. From fifteen to twenty minims of the strong solution of ammonia, or, better still, of the strong alcoholic solution of ammonia, may thus be administered in the course of every two hours in divided quantities, and the effect may be sustained until the blood-corpuscles begin to show signs of solution. The details of two severe cases, thus successfully treated, were related, and those of a third case in which, although death took place from secondary lesion, the effect of the alkali in resolving the fibrine was well marked. It was not assumed by the speaker that under this treatment a majority of affected persons would recover, but the practice was simple and sound in every clear case, and, commenced early enough and persisted in firmly, would at least save some from what is otherwise inevitable death. For this reason he pressed it earnestly on the attention of the Society.

Dr. Playfair said that any reply to the observations that had been made seemed unnecessary. Dr. Savage

had found fault with his paper, as treating of a subject which he seemed to think was exhausted. So far was this from being the case that there was not a single English text-book on midwifery in which it was even alluded to, not even in the recent and admirable work of Dr. Leishman, published only a few months ago. Indeed, his paper was the first attempt to collect together the information which existed in regard to thrombosis and embolism in reference to the puerperal state. It should be remembered that Virchow's writings referred to the subject in general, not to its obstetric relations, and when the paper was written Dr. Fordyce Barker's work had not appeared. He contested Virchow's view as to the invariable embolic origin of pulmonary and cardiac clots, and to this Dr. Savage took exception. He was gratified to find, however, that he had Dr. Richardson's high authority in support of his view. There was little in Dr. Richardson's remarks that called for comment; they contained nothing in opposition to what was stated in his paper. Dr. Richardson objected to the use of the words thrombosis and embolism as barbarous, but he proposed no substitute for them, and as some distinctive appellation was necessary they might surely be used until some better names were invented. They, at any rate, had the advantage of distinguishing the two classes of cases. With regard to the administration of ammonia he had said in the former discussion that Dr. Richardson had himself abandoned his theory as to ammonia in the blood maintaining the fibrine in solution. Dr. Richardson's remarks showed that he had been right in making that assertion. Dr. Richardson, however, recommended the administration of ammonia, on the hypothesis that it would aid the solution of the fibrine already deposited. That was an entirely different thing, and on that ground the remedy might be well worthy of a trial in future cases.

MAY 6TH, 1874.

EDWARD JOHN TILT, M.D., President, in the Chair.

Present—30 Fellows and 3 visitors.

Books were presented by Dr. Bulkley, Dr. Goodell, Dr. L. Neugebauer, and the Smithsonian Institution.

H. H. Dendy Lewis, M.R.C.S., and William Hey Kempster, L.R.C.P. Ed., were admitted Fellows of the Society; and the following gentlemen having sent up their obligation papers signed were declared admitted:—Dr. Wm. A. Concanon (Pill, Somerset), Dr. Chas. M. Crombie (Aberdeen), Dr. R. M. Fraser (Darlington), Mr. J. T. Jones (Llanfyllin), Dr. J. A. Macdonald (Woburn), Dr. Stephen Skinner (Clevedon), and Dr. A. D. Sinclair (Boston, U.S.).

The following gentlemen were elected Fellows of the Society:—Alfred Lewis Galabin, M.D.; Alfred Boyd Hopkins, M.R.C.S.; Geo. Alex. Simpson, M.D.; and Reuben Thomas Warn, M.R.C.S.

The following gentlemen were proposed for election:—Herbert Cooper, L.R.C.P. Ed.; Charles Francis Lewis, L.R.C.P. Ed.; Robert Alex. Lithgow, L.R.C.P. Ed.; Alex. Paterson, M.D.; and W. B. Slayter, M.D.

The following report on Dr. Willing's female fœtus, supposed fœtal age about five months, was read:

"Length 13 inches; nails well formed; hair of scalp of a dark colour; skin pale red. Cerebral convolutions and valvulæ conniventes well developed; meconium in the

intestines. Lungs with heart attached, and also in pieces; floated freely in water.

"Heart well formed, a small quantity of coagulum in each ventricle. Uterus, ovaries, and vagina well formed, but small, presenting their usual relations.

"Eyelids non-adherent; iris well developed, or moderate-sized pupil; no membrana pupillaris. The age of this fœtus we believe to be between the sixth and seventh month.

"Henry Savage,
"C. H. F. Routh."

A NEW VAGINAL SPECULUM.

Exhibited by J. Hall Davis, M.D.,
OBSTETRIC PHYSICIAN AND LECTURER ON OBSTETRIC MEDICINE AT THE MIDDLESEX HOSPITAL.

We have all of us experienced the inconvenience attendant upon the employment of Ferguson's vaginal speculum, this arising from its ready liability to fracture under sudden changes of temperature and by collision.

This has often led me to wish for a substitute in some other suitable material which should be exempt from that liability and, at the same time, present a form and surface to ensure a perfect illumination of the os uteri.

I had already on two occasions ordered a tapering metallic speculum, but the maker did not carry out the order satisfactorily. During my visit to the museum of the British Medical Association I mentioned my requirement to Messrs. Arnold, surgical instrument makers, and they at once undertook and have since executed the commission in accordance with my instructions,—that the instrument should be a tapering and metallic tube, having an external expanded trumpet-shaped opening, the width of the tube gradually lessening towards its smaller or uterine aperture.

The instrument is manufactured in two combinations of metals: one electro-nickel plated on copper, the other silver-plated on copper, with an electro-gilding for a little

more than two inches at the uterine end, externally and internally. The *lengths* of the three sizes at their posterior aspect are $5\frac{3}{4}$, $5\frac{2}{3}$, $5\frac{1}{8}$ inches, respectively; the outer or trumpet-shaped openings are $2\frac{2}{3}$ inches in the largest, $2\frac{1}{3}$ inches in the smallest size. The inner or uterine apertures are $1\frac{2}{3}$, $1\frac{1}{4}$, $1\frac{1}{8}$, respectively, in the three sizes.

The uterine opening is moderately bevelled and the edges carefully rounded, as I had directed. I have had opportunities of judging of the efficiency of the instrument as a good enduring speculum, which will need to be repolished at a small cost at long intervals. The gilding and nickel will defend the instrument from the action of nitrate of silver.[1]

Dr. Routh thought one disadvantage would be that it would tarnish readily and would not resist the action of nitric acid, bromine, acid pernitrate of mercury, &c.

Dr. Davis replied he was aware that nitric acid and pernitrate of mercury would attack the metal; but these are far less frequently required than nitrate of silver, and when so required a glass speculum or one of porcelain might be substituted. The channel or gutter he (Dr. Davis) had already pointed out as an objection to Mr. Arnold, who had undertaken to remedy it.

Dr. Godson stated that he had employed Neugebauer's speculum, and bromine corroded it readily.

Dr. Heywood Smith said he wished to point out with regard to the speculum that Dr. Hall Davis had just exhibited that in order to make the vaginal end rounded the metal had been turned inwards, and this formed a gutter wherein would be lodged, vaginal discharges, &c. This he considered a great disadvantage, as in hospital practice, where specula are in frequent use and have

[1] Mr. Arnold is also making specimens entirely of nickel.

to be constantly washed, there would be a great difficulty in getting this part clean, and if not properly cleaned it would form a channel whereby noxious matter might be conveyed from one patient to another.

Dr. Godson exhibited a twin abortion in which one embryo, measuring five inches inches in length, showed great emaciation, and the other presented no trace of head or upper extremity. Though apparently of no more than three months' development they were not expelled from the uterus till five and a half months after impregnation. There had been no opportunity of examining the placenta.

Dr. Godson referred to a diagram in Dr. Eduard Martin's Atlas, of a monstrosity very similar in appearance.

He thought it an interesting question whether the development of the head and upper extremity had been suddenly arrested, or whether they had become absorbed during the time which had elapsed between the cessation of vitality and the expulsion from the uterus.

Dr. John Williams.—The appearances presented by the upper surface of the trunk of the acephalous fœtus seem to point to amputation as the cause of the malformation. Near the posterior margin of this surface, and in the situation of the spinal column, is a small hard firm projection. This appears to be continuous below with the vertebral column and is probably the amputated extremity of it which has remained uncovered by soft tissue. The posterior margin of this surface is somewhat raised and round, and presents much the same appearances as are found at the margin of a recently healed wound. I have not found such appearances in the acephalous fœtuses which I have had opportunity to examine, and this one appears to me to have been produced in the manner I have indicated.

Dr. Godson and Dr. John Williams were requested by the President to draw up a further report.

Dr. Barnes exhibited for Mr. Kesteven, junior, the upper portion of the trunk and head of a fœtus where the arm, face, and foot had presented. The right hand and arm were projecting from the vagina, the left being imme-

diately within or between them, the face presenting posteriorly, and between the pubis and the chin the left foot could be felt. Whilst preparation for turning was being made the child was suddenly expelled dead. This was explained by the fact of the total deficiency of the occipital bone. Extending backwards from the head was a large soft bag, consisting of the scalp, the meninges, and the brain.

Dr. Barnes remarked that the chief point in this case was the difficulty in making a diagnosis on account of the bag supplementing the head.

Dr. Westmacott asked if there was fluid in the bag.
Dr. Hayes thought the specimen deserved fuller examination.
Dr. Barnes said Mr. Kesteven proposed doing so.

Dr. T. C. Hayes exhibited a carcinomatous tumour originating, he thought, in the broad ligament, which, according to some anatomists, was properly regarded as an expansion of the uterus. The clinical features of the case from which the specimen was taken were almost wholly wanting. The patient, a woman between 30 and 40 years of age, in an extremely emaciated and well-nigh moribund condition, was admitted into King's College Hospital, under Dr. George Johnson. She died a few days after admission without any diagnosis being come to. At the autopsy an irregular semi-elastic tumour, somewhat larger than the fœtal head at term, was found in the right iliac fossa; its inner margin reached to the brim of the pelvis; the bony tissue, as far back as the vertebræ, was superficially infiltrated with the morbid growth, which extended up between the layers of the broad ligament to within a short distance from the uterus and the ovary. These were quite intact. The pelvic, lumbar, and inguinal glands were only slightly enlarged, without being diseased. The other organs were unaffected with cancer. The microscopical appearances of the tumour were those of medullary cancer.

The PRESIDENT inquired in what way the bone was involved.

Dr. BARNES asked if there was any evidence of cancer in the other organs.

Dr. ROUTH inquired if a microscopic examination had been made.

Dr. HAYES brought before the Society a preparation of a pelvic tumour which he regarded as cancerous, commencing in the outer ligamentous cellular tissue of the broad ligament, &c.

Dr. SAVAGE thought there was no reasonable objection to the view taken as to the cellular origin of the tumour, cancer being the offspring of cellular tissue or its allies. But might not the tumour have commenced at the bone? In the preparation the uterus appeared to be free—adherent, but not invaded. What was the state of the bony surface where it so firmly adhered? Was that surface simply denuded, absorbed away by the pressure, or actually involved? The broad ligament, considered as a uterine prolongation or offshoot, was an idea of Rouget, which was abandoned long ago. One might as well call the mesentery a prolongation or offshoot of the intestines. Scarcely any smooth muscles, those of the round ligament excepted (and this forms no part of the broad ligament), exist in the anterior layer; they exist more or less in the posterior layer. The arrangement of these fibres in relation to the ovary corresponds in some degree with Rouget's conception of them. The fibres near and about the ovary are supposed by Virchow to possess a sort of corrugating function not dissimilar to that performed by the dartos. There are no muscular fibres on the alar ligaments. The history given of it was instructive in many ways. In this case the propriety of resorting to gastrotomy was for a time under consideration, so he understood. Even modern diagnosis was still lamentably at fault in such cases. The pelvic adhesion, of course, could be made out, but pelvic adhesion was not now considered a bar to gastrotomy. Mere physical diagnosis would not disclose the true character of these tumours, but in this instance were there no indications calculated to throw more light upon it?

Dr. HAYES explained that the bone presented the appearance of caries being honeycombed.

Dr. SQUAREY had seen cancer originating in the glands and extending to the broad ligament.

The PRESIDENT requested Dr. H. Smith and Dr. Squarey to report upon the specimen.

STATISTICAL AND PRACTICAL REMARKS ON CONSULTATION MIDWIFERY IN PRIVATE PRACTICE.

By E. Copeman, M.D., F.R.C.P., Norwich,

SENIOR PHYSICIAN TO THE NORFOLK AND NORWICH HOSPITAL.

Statistical tables on the subject of midwifery have often been published both by private practitioners and by those connected with public institutions, and this not only in towns, but in country localities also. The average of success has varied, but, as from a variety of circumstances might be expected, the country has the advantage. Yet the difference is not so great as many would imagine, and the usual average is pretty well understood by the profession. Many years ago I published in the 'Medical Gazette' a history of cases attended by myself in country practice; Mr. Rose, of Swaffham, Mr. Bailey, of Thetford (who lately died at the advanced age of eighty-five years), and the late Mr. Earle, of Cromer, were also amongst the number who reported their experiences of the results of country practice. I believe the chief difficulties which occurred to them, and others similarly situated, arose from delay in the act of parturition occasioned by the *large size of the children;* but few deaths resulted from this or other complications connected with the parturient state. In large towns there is a difference, and the rate of mortality is higher. The mothers, as a rule, are not in such rude health; the fathers are not so strong and are more subject, through temptation, to debilitating habits; their mode of life also, and the habitations they occupy, are not so favorable for safe and rapid delivery. Yet, notwithstanding all this, the mortality in ordinary cases of midwifery is marvellously small considering the great stress upon mind and body which the painful process entails. It is providentially ordained that "a woman when she is in travail hath sorrow because her hour is come, *but as soon as she is*

delivered of the child she remembereth no more the anguish, for joy that a man is born into the world."

I do not remember that any general statement of the mortality occurring in consultation practice *alone* has been published, and I am about to state what it has been within my own personal experience during a given number of years. I think this may be entering upon a somewhat new field, and perhaps be interesting to the meeting, for I find that, even in difficult and very trying cases, a fairly good account may be given of our stewardship provided only sufficient caution, skill, and prudence be exercised in the management of them. Let us now see how matters stand when the cases referred to are all in *consultation* practice, and are, therefore, of an *unusually severe or complicated character*, and do not include any attended alone as ordinary cases of midwifery.

The number of cases included in this paper is 216, all of them being of a more or less dangerous character, in which my assistance was requested by competent practitioners. The result was that 198 recovered and 18 died, a proportion of deaths to cases of 1 in 12:

Table of Cases.

	Cases.	Mortality of Mothers. Recovered.	Died.
Craniotomy	14	13	1
Convulsions	10	9	1
Vectis	78	78	
Version	23	18	5
Forceps	6	6	
Placenta prævia	12	11	1
Previous separation of placenta	7	5	2
Retained or adherent placenta	19	17	2
P. p. hæmorrhage	28	27	1
Twins	7	6	1
Apoplexy	1	1	
Monster	1	1	

	Cases.	Mortality of Mothers. Recovered.	Died.
Distorted pelvis . . .	1	1	
Tumour in pelvis . . .	1	0	1
Hydrocephalus . . .	2	2	
Syncope	3	3	
Pyæmia	1	0	1
Ruptured uterus . . .	2	0	2
	216	198	18

Now, I find that in these 216 cases craniotomy was performed in 14, of which 13 recovered and 1 died; this one being almost *in articulo mortis* when the operation was resorted to as a last resource. There can be but little doubt that craniotomy is generally a safe operation if not too long delayed. In cases *absolutely requiring it* the chances are much against the probability of the child being alive, and sometimes we can determine that the child is already dead; so that I feel confident that under either circumstance, that is to say, the probability or the certainty of the death of the child, the sooner craniotomy is performed the more secure will be the life of the mother. There is much greater danger to the mother by delay and long-continued pressure on the soft parts by an impacted head than by the careful use of the perforator. Whilst upon this subject I must say a word about the crotchet, in order to denounce it as a more or less dangerous instrument, and often very ineffective in accomplishing the objects for which it is employed. Its hold is uncertain, and if it slip it may do serious mischief. A much better instrument, in my opinion, is the blunt hook, which in many ways may be extremely useful, both in craniotomy and in the operation of turning. I may have a word or two more to say about it in the sequel.

The other 17 deaths occurred as follows:

5 in which turning was necessary.
1 in a case of placenta prævia.

2 in previous separation of the placenta.
2 from adherent placenta.
1 from *post-partum* hæmorrhage.
1 from hæmorrhage in a case of twins.
2 from ruptured uterus.
1 from convulsions.
1 from pelvic tumour.
1 from pyæmia.

17

The cases of version were 23 in number, of which 18 recovered and five died. Twelve of them were in consequence of placenta prævia, one only being fatal. The other four deaths were—from convulsions one, previous separation of the placenta two, distorted pelvis and pelvic tumour one.

The operation of turning is often easy of accomplishment, but sometimes, especially in consultation practice, extremely hazardous and difficult, the difficulty arising from attempts previously made without success, where the liq. amnii has escaped, and the uterus is firmly contracted upon the body of the child. If great care and caution, however, be observed, and the practitioner has experience of such cases, the hand can generally be introduced with safety; and perhaps a little more easily, *as far as the vagina is concerned*, in consequence of the previous attempts which may have been made. It may be that a partial version has been already accomplished and one of the feet been brought down through the os; if so, it will not be very difficult to reach the opposite groin with the finger, *the hand being in the vagina*, and then by carefully guiding the blunt hook over the upper part of the thigh, the other leg may be drawn down *without forcing the whole hand into the uterus*. So also with the arms; if with the finger they can be felt distinctly and the blunt hook can be passed over the shoulder or elbow, they may be brought down without the necessity of *passing the whole hand into the*

uterus. In some cases, where I have found the breech so high up as to require the hand to be passed a considerable distance within the uterus, the blunt hook has been a most useful and efficient instrument when carefully guided over the upper part of the thigh, the end of it being protected by the finger so as not to injure the uterus. It occupies but very little room, and in such cases I can truly say it is almost equal to a second hand. I strongly recommend its use to those who may experience difficulty in the act of turning, either in consequence of extreme contraction of the uterus, or from the very high position of the lower limbs of the child.

The only case in which death was occasioned by convulsions was one of peculiar interest, and you will find it recorded in the October number of the 'British and Foreign Medico-Chirurgical Review' for 1873. Two cases occurred where there was adherent placenta. In one the patient was confined with her second child without difficulty, but the placenta was found to be so firmly attached that her medical attendant could not remove the whole of it, and she had severe and almost fatal hæmorrhage before I was called to his assistance; some more of the placenta was removed after my arrival, but even then a portion was obliged to be left. The hæmorrhage, however, ceased, and she recovered sufficiently to give us some hope, but she never rallied completely, and died in a few days. In her first labour there had also been an adherent placenta, giving much trouble in its removal.

The two cases of death from "previous separation of the placenta" depended for their fatal issue upon sudden and profuse hæmorrhage before the completion of the natural term of pregnancy. They seemed as it were to be hopelessly prostrated by the first loss and could not afterwards be rallied.

The one case of death from *post-partum* hæmorrhage was that of a young mother of five children confined a little before 7 after a natural labour followed by hæmorrhage. I was called to her at 9.30 and found her pulseless and

deadly pale, with free oozing, and the uterus not constantly in a state of contraction. I removed a large quantity of clots from the vagina and introduced ice as soon as it could be procured. This stopped the loss, but she was too far gone; her pulse did not become perceptible, she never rallied, but lingered on until 12.30, when she sank exhausted. She had experienced several attacks of flooding during her pregnancy; belonged to a consumptive family; and had a very weak constitution.

Time will not permit me to analyse more minutely the table of cases I have placed before you; but there is one subject that I must dilate upon to some extent, and that is the successful use of the vectis in difficult cases of midwifery. In the number of cases I have brought forward I have employed the vectis as a means of delivery in seventy-eight without any fatal result. In one other case in which the vectis was used the patient died of pneumonia and dropsy; in another of hæmorrhage from previous separation of the placenta, and a third of puerperal fever; none of which had any relation whatever to the use of the vectis. In my own experience the vectis has been a most valuable and efficient instrument. With it I have been enabled repeatedly in severe cases to accomplish delivery, where in other hands both forceps and vectis have failed. I do not make this statement in any spirit of boasting of my own deeds, but of thankfulness for having been able by practice to use it effectually to the relief of so much suffering and with so little danger. I feel myself fully justified in recommending the use of the vectis to every practitioner of midwifery. Many in Norwich and the neighbourhood have witnessed its usefulness and have gradually brought themselves to rely upon it in cases of difficulty from impaction of the head. If fully understood, it will answer the purpose of either long or short forceps, and is much more easy of application than either. It is less formidable in appearance to the attendants as well as to the patient; its introduction gives no pain, it can accomplish several things in rectifying the position of a child's

head which cannot be so easily effected by the forceps; it very seldom occasions rupture of the perinæum, and, if of proper form and shape, does no injury to the soft parts of the mother that would not be equally caused by the pressure of the head itself. Indeed, by using it early in cases where it is probable or certain that instrumental assistance will be required, the soft parts of the mother are more quickly relieved from a degree of pressure from the head of the child, which, if long continued, might entail the most serious consequences in the way of inflammation and sloughing, and thus diminish considerably the chances of recovery.

Students are not taught the use of the vectis; the name of it is seldom mentioned by teachers in the schools except to abuse it; and therefore when they become practitioners they begin with a prejudice against it, and an *occasional* trial probably leads to failure. I endeavoured to describe the shape and size, and the mode of using my vectis, in a little volume published some years ago entitled 'Obstetric Records of Consultation Practice,' and have the satisfaction of knowing that many before unacquainted with the vectis have since employed it, much to their comfort and satisfaction.

Dr. Wiltshire said that, being struck by Dr. Copeman's praise of the vectis, he had procured an example of that gentleman's instrument, which he now presented to the notice of the Society in order that its peculiarities might be appreciated.

Dr. Barnes remarked that the great and only fault of the paper was its extreme brevity. It scarcely afforded scope for discussion, as the conditions necessitating treatment were not given. There were two points worth noting: his preference for the vectis over the forceps; and 2ndly, there were two deaths from hæmorrhage. This ought never to happen if local treatment were regarded as the necessary complement to other remedies and used at the proper time. The vectis was a lever and must remain so; it could not be, strictly speaking, a tractor. We might bring the head down by pressing against the pubis. How it could be substituted for the long forceps he could not understand unless the handle was pushed into the vagina. When

the head was in the pelvis anything would do to effect delivery, uterine action being set up by the irritation or interference. The head being expelled no tractile force was required, dislodgment of the head from an improper position was all that was required, and labour went on at once. The vectis might do as well as the forceps in some cases, where there was a want of adaptation of the head to the pelvis; but the vectis could accomplish less than the forceps, the latter being far better in most cases.

Dr. SAVAGE would have been glad to hear more about the treatment of convulsions, but nothing was said in the paper. The results seemed unusually satisfactory. It was a pity the treatment was not given.

Dr. EDIS thought that in the cases given the vectis had been resorted to where, ordinarily, forceps would have been applied by most practitioners; and, indeed, the sooner forceps came to be considered as aids to labour, supplementing defective uterine expulsion by traction in place of their application being looked upon as a formidable operation to be avoided as long as possible, the better for every one concerned. Dr. Hamilton, of Falkirk, had shown that the forceps might be used, not only with impunity, but with manifest advantage, in numbers of instances, where generally patients were allowed to exhaust their powers and expend their strength in fruitless efforts to overcome a difficulty that the forceps would remedy in a few minutes. Craniotomy would hardly be justifiable until forceps had been tried.

Dr. T. C. HAYES was forcibly struck with the fact that the number of forceps cases was very small compared with the number of cases in which recourse was had to craniotomy. The forceps had a compressing power which the vectis did not possess; and if the vectis were used in preference to the forceps, it must inevitably follow that many a fœtal head, which required but a slight compression to bring it through the pelvis without a sacrifice of the child's life, would be delivered by craniotomy. He thought the mere enumeration of cases, without a more or less detailed account of their clinical features, was almost utterly worthless.

Dr. WILTSHIRE said that he had gathered from Dr. Copeman's book that he regarded the instrument strictly as a tractor and not as a lever. It was evidently a favourite of Dr. Copeman's as shown by the large number of cases in which he had used it, and probably in his hands was more efficient and safe than it was likely to be in those of others. Dr. Wiltshire pointed out that the edges of the instrument were too sharp.

ON THE PROPRIETY OF ADMINISTERING IRON DURING PREGNANCY AS A PREVENTIVE OF POST-PARTUM HÆMORRHAGE.

By John Bassett, M.D.,
PROFESSOR OF MIDWIFERY IN QUEEN'S COLLEGE, BIRMINGHAM.

I desire to place before the Fellows of the Obstetrical Society of London a portion of my experience on the subject of post-partum hæmorrhage, and I ask permission to do so on the grounds that I have had a wide experience, and that I have carefully watched all the phenomona connected with flooding for a period of more than five and twenty years.

At the commencement of my career as an accoucheur I learned from my preceptor Dr. Lever the importance of paying attention to the health of pregnant women; this advice was given more especially in view of the certainty of puerperal convulsions occurring in the labours of those who suffered from œdema of the hands and face during pregnancy; and of the probability of severe hæmorrhage following the birth of the child in those patients who were the subjects of chronic Bright's disease. As time passed away the value of the advice just alluded to became more and more apparent, as one or other of the ills that pregnant women are liable to came under observation, until I arrived at the conclusion that the popular belief in the inefficiency of medical treatment during pregnancy was based upon a fallacy, and that whilst it could not be asserted that all the disorders of pregnancy would pass away as readily as in the non-pregnant state, still that very many of them were capable of subjection and others of mitigation, and that it was the duty of every accoucheur to bear constantly in mind that pregnancy was nature's highest physiological work, and one that ought to go on without trespassing on the domain of pathology, but one which from its delicacy and minuteness was liable under the most

primitive conditions to run into error. It will I think be accepted as a cardinal proposition that a healthy conception and gestation will be followed by a natural labour, a favorable recovery, and a successful period of nursing, and that departures from this standard may take place at every stage of the process; the primitive cells may be endowed with a feeble vital power, or they may contain within themselves poisonous elements, or they may fail in their growth from the pabulum on which they are sustained being defective in quantity or depraved in quality, and so we have the foundations on which the numerous irregularities of pregnancy are based.

My habit of paying attention to the health of pregnant women soon brought me into close relation with those who have severe floodings after the birth of each child; these I found almost uniformly out of health, and although they did not complain so much as others, still they were subject to fatigue, were listless, dyspeptic, nervous, and of weak muscular fibre; the appetite for meat as an article of diet was commonly defective. I am not able to say they all presented similar characters of ill health, since some would have an excess of fat in the body and others a deficiency, but they all appeared to agree in a defective power of assimilation and organization; they invariably described themselves as weak and easily fatigued; the majority complained of cramp and pain in the side—indications that the pregnancy was not a healthy one and that a morbid process may be going on in the placenta; these cases watched at the time of labour still presented signs of want of muscular power, the labour was either too easy and terminated too rapidly or became powerless; the placenta was in some cases small, soft, and friable and in others preternaturally hard, from some part of it having undergone inflammatory and fatty changes. The blood in some of these cases seemed unlimited in quantity, but was watery and dark coloured; the uterus after delivery assumed various forms, sometimes it would not contract at all, more commonly, however, one part would go into a violent state of spasm, whilst the other

was perfectly flaccid, and if this flaccid portion happened to be the placental site, blood was poured out as from a fountain; in other instances the contraction was regular and strong, so that the coagula and fluid blood were expelled, to be followed by relaxation and further hæmorrhage.

Unfortunately we do not understand perfectly either the physiological or the pathological results which pregnancy induces in the system. Writers affirm that during pregnancy the volume of the blood is increased and that it is altered chemically and physically. The French chemists Becquerel and Rodier inform us that pregnancy exerts a marked influence over the composition of the blood, that the density of the liquor sanguinis is diminished, whilst the water, fibrin, and phosphorised fat are increased, and that the albumen and corpuscles fall below the healthy standard. Simon confirms this by stating that the fibrin and fatty matters are increased, whilst the solid constituents are diminished; these are changes in a retrograde direction, and if they proceed far will very readily explain why anæmia and chlorosis are sometimes marked results of pregnancy, and why where we have defective power of nutrition and assimilation we have that constitutional debility which is associated with an irregular supply of nerve power, faulty muscular organization, and redundance of watery blood, which fails to convey its natural stimulus to the organs with which it comes in contact, and hence we have powerless labour, inertia uteri and hæmorrhage. Further, the chemical changes just noted may explain why with a real debility we have such a tendency to inflammatory action, a fact within the knowledge of all who have watched these cases closely; further observations are needed on the pathology of the blood in general and especially on the changes which it undergoes in a healthy and a morbid pregnancy. It is also desirable that the muscular structure of the uterus should be carefully examined, not only in those who are liable to post-partum hæmorrhage, but in other instances, where the placenta has been the seat of

marked pathological processes, in order to ascertain, on the one hand, how far the uterus has participated in the defective power of organization, and how far on the other it has partaken in the fibrous and fatty changes of which the placenta is the seat.

I may now proceed to relate what has occurred with reference to some of my patients: one case will suffice as an illustration.

My attention was particularly directed to the case of Mrs. G—, on account of the severe floodings which she had after the births of her first three children, her life in each instance seemed to have very nearly ebbed away, and it appeared but too certain that she must perish if she continued childbearing; an examination of her when seven months advanced in her fourth pregnancy convinced me that she had some of the signs of debility of which I have just spoken, and with a view to improve her health and strengthen her muscular fibre I prescribed a mixture containing soda, ammonia, and ammonio-citrate of iron; but as the proceeding was a tentative one, the method was not carried out with accuracy; however, a marked improvement occurred in her labour, both in the power of the uterus and in the greatly diminished loss of blood; in a subsequent pregnancy, where the treatment was carried through with care, the most marked result followed in the shape of a perfectly natural labour, without unusual loss of blood. Other instances in confirmation of these facts might be quoted; this would be a repetition of words; nor have illustrations in the opposite direction been wanting where patients who have previously flooded have failed to submit themselves to treatment, although they have derived singular advantage from preliminary treatment, in some of the previous confinements. The cause of this omission has sometimes rested with myself, at others with the patient; as a rule patients are most willing to submit to any treatment which will prevent the much dreaded floodings, and in the majority of cases where flooding was known to be likely to occur and no preventive treatment had been adopted, it

did return in as violent and marked a form as on previous occasions.

As regards the method carried out I have usually advised my patients to see me when a little more than seven months advanced in pregnancy, and earlier than this if they found anything amiss with themselves; I have then prescribed *iron* in combination with an *alkali* or an *acid* as the circumstances seemed to indicate, if the arterial tension justified and the secretion from the kidneys was defective, *potash* was usually administered; if, on the other hand, the liver appeared to be sluggish and the skin sallow, then *soda* was preferred, in other instances, where pain after food was complained of, and an acid was grateful to the palate, the tincture of steel was ordered with hydrochloric acid and calumba. In all cases regularity of living, uniform clothing, daily exercise, and attention to the secretions, were strictly enjoined, and no doubt these may be credited with some of the improvements which took place in the health of my patients. It was not considered needful in every instance to continue the treatment up to the day of confinement provided a fair standard of health had been reached before; as regards this, no rule can be laid down; each case must be judged by itself.

In conclusion, I ask at the hands of the Obstetrical Society that the method which I have found so useful may receive a fair trial and be judged by the result; whatever our foresight, it will be impossible to always anticipate post-partum hæmorrhage, since it frequently arises from circumstances which are brought about during the progress of the labour, nor is it any part of my present object to travel over the now familiar ground of the anticipation and treatment of post-partum hæmorrhage, since the several questions embraced on this subject are receiving a judicial examination at the hands of the profession.

Dr. Barnes asked if any of the Fellows had ever seen any reason to suppose that premature labour had been caused by the

administration of iron. He thought we had not sufficiently ascertained the changes and diminution of vital force induced by pregnancy. A series of changes of a most important kind occurred, and if we only understood these we might preserve our patients from the consequences. As a rule, pregnant women did not place themselves under treatment. He alluded to an instance where a pupil of his had given iron to a pregnant woman, who was in consequence accused of intending to produce abortion. Dr. Barnes himself had given it in dozens of cases, and had never witnessed any ill-consequences or instances in which abortion could be traced to its administration. He thought iron might safely be given where anæmia was present during pregnancy, to improve the patient's condition, and lessen the risk of hæmorrhage during parturition.

NOTICE OF A NEW OPERATION PERFORMED ON A LADY, WHO PRESENTED A CONSIDERABLE ATRESIA OF THE VAGINAL ORIFICE OF THE NECK OF THE UTERUS.

By Dr. V. Saboia, of Rio Janeiro.

I have frequently performed cervical hysterotomy, or the double incision of the sides of the neck of the womb, not only with the bistoury, but also with the scissors and with Greenhalgh's hysterotome, with a view to remove the stricture of this part of the gestatory organ, and especially the phenomenon of dysmenorrhœa and the barrenness with which it is attended. By my advice the Professor Dr. Teireira la Rocha has in the same manner performed like operations, but finding that it was sometimes difficult to preserve the degree of dilatation which resulted from the incisions of the cervical canal, although care has been taken to introduce into the neck a cone of sponge prepared according to the process of Sims, and seeing that on account of their relative positions the angles of the incisions were constantly disposed to unite, and that there was

no means beside the sponge to impart the disposition of the natural commissure, and noting beside this that the incision, being made somewhat more extensive and deeper, might induce serious hæmorrhage, as happened in a case operated upon by Dr. Rocha, and as Sims had occasion to observe sometimes, I undertook to modify the operation in some respects by the following method :

I was called in February to see a lady of twenty-four years of age, who had been married two years ago and was well formed, who never conceived, though in her family no one was barren, and her husband already had children by a first marriage. She only complained of a somewhat abundant leucorrhœal discharge, consisting of a glutinous fluid and sometimes resembling a catarrh ; the menstruation appearing regularly, but in small quantity, and being accompanied with intense lumbar and pubic pains, and with prostration, nausea, and headache. Examining the uterus by the *toucher*, I found the vaginal portion considerably elongated, having a length of one and a half inch, of a conical form, of normal consistence, and having the lips placed in a manner that between them there was scarcely perceived a point in which the want of resistance made it known that there was an external or vaginal orifice of the cervical canal. Combining the *toucher* with the manual external examination through the abdominal parietes, I did not find increase of volume in the uterus, and the sound carried with all care to the bottom of the cavity of the organ penetrated to the extent of three inches without impediment of any kind, and without making me acquainted with any uterine deviation. By using the speculum of Sims I found the vagina with a well-defined red colour and bathed with a cream-like liquid, somewhat abundant and of a sickening smell. The neck presented in the most prominent part a small orifice of one fifth of an inch in diameter, with a circular form whose circumference appeared slightly excoriated. This orifice was found full of a glutinous transparent mucus that with difficulty could be drawn from the cervical opening, it being observed that a new portion

of liquid of the same nature came at once to supply the place of that which was withdrawn by the nippers. The causes of sterility are undoubtedly very complicated, and the obstruction of the orifices of the cervical canal cannot be considered as an essential mechanical condition of this abnormal state, but I have observed that when to this there is united some considerable elongation of the neck, yielding at the same time an increased secretion of the glands of Naboth, or of the glutinous liquid that constantly obliterates the cervical canal, barrenness infallibly appears; and thus as tne spermatozoa encounters difficulty in passing by the neck to the ovaries, in the same way the menstrual blood ceases to flow freely, and, accumulating in the uterus in greater or less quantity, produces a distension of the organ, followed shortly by feverish and painful contractions and with indications of reflex phenomena on the part of various organs of the digestive apparatus. These pains radiate from the womb to the neighbouring parts, and may be manifested so soon as the glandular follicles of the internal surface of the organs are the seat of a more active secretion by virtue of the congestion of the first period of menstruation. In any event to promote at least the sanguineous flow during menstruation and to impede the accumulation of the liquid secreted by the glandular follicles in the cervical canal of the uterus, any means tending to destroy the stricture of the external orifice should be seized upon. I had but little confidence in the simple dilatation by the sponge and the hysterotomy, for the reasons which I gave would not, perhaps, secure a permanent result. As I have shown, the disadvantages of this operation consist in the tendency to cicatrization by the angles of the incision, and then I reflected that if at the outset there should be found on each side of the external orifice and at a small distance from it two fistulous tracts which should start from that point and extend to the cervical canal, whose walls should be covered again with a cicatrised membrane and without any tendency to union, the tissues included between two fistulous tracts, and the orifice at the

outlet of the cervical canal, might be afterwards cut on each side, without apprehension that union would occur in the angles of the incision. But how are those same fistulous tracts to be established? I thought at the outset of carrying a needle-holder armed with a needle and a florentine thread to the cervical canal, and placing the needle in such a position in regard to the holder that it could transfix the wall of the cervical canal from within outwards, to come out one fifth of an inch on the side of the small external orifice of the neck. It was, however, impossible for me to introduce in this part the needle-holder, or even a pair of nippers with the needle so placed as to realise that which I had in view, and therefore I availed myself of a tubular needle armed with a silver thread, and carried it at the distance of one fifth of an inch from the small cervical orifice, and made the point pass out at an equal distance on the other side of the same cervical orifice. After the silver thread was made to pass out I seized the extremity of it with the nippers and withdrew immediately the tubular needle.

For this end, then, after having passed the wire as I have said, I carried the nippers into the cervical canal, and seizing the middle part of the same wire brought it out and cut it, remaining thus on each side of the cervical canal, within this orifice where the wire had penetrated, a silver loop, whose ends were slightly twisted, and there left until the tracts where they had passed should take the character of fistulous openings.

I availed myself, as I generally do in all cases of treatment of the neck of the uterus, of Sims's speculum, and although the neck of the uterus was very accessible, and held by a small hook towards the vaginal opening, nevertheless the passage of the wire was not very easy on account of the great curvation that the needle had to make to pass from one side to the other of the neck at a small distance from the external orifice. There was not during the operation any more than insignificant sanguineous discharge, and the wires that were retained for a month

have not produced any inconvenience. The two loops during this time were twisted a little every eight days, until, finding that the walls of the canals through which they passed were so constituted as not to unite, they were removed, and cutting at the same time the remaining tissues with a long and narrow bistoury guided by a director I established thus the continuation of the fissure of the neck of the uterus, this having an extension of half an inch.

The operation was performed in February, 1873, and having examined this lady within a few days, she informs us that she does not suffer any more from the troubles that formerly afflicted her, and that her menstruation appears regularly and painless.

I availed myself some two months ago of this same method of operating upon a woman that suffered from constriction of the neck of the uterus that had been operated upon by me some four years since by means of the incisions with the Greenhalgh's hysterotome, and in which, after passing some time, the constriction of the neck was reproduced in an aggravated form, and up to the present time the result promises to be favorable, as in the first upon which I operated.

Dr. TILT thought that division of the cervix would have been better in the ordinary way, the risk being less and the advantage greater.

Dr. EDIS concurred with the President, that it was hardly worth while making such a tedious operation, extending over a month, when it might have been done equally well and more satisfactorily in a few minutes by a slight incision.

JUNE 3RD, 1874.

EDWARD JOHN TILT, M.D., President, in the Chair.

Present—32 Fellows and 5 visitors.

Books were presented by Dr. Rudolph Birnbaum, Dr. George Bland, and Dr. C. E. Buckingham.

Dr. George Boddaert, of Ghent, was declared admitted as a Fellow of the Society, and Dr. Wm. Borwick Robertson and Mr. Reuben T. Warn were admitted Fellows.

The following gentlemen were elected Fellows:—Herbert Cooper, L.R.C.P. Ed.; Charles Francis Lewis, L.R.C.P. Ed. (Henfield); Robert Alex. Lithgow, L.R.C.P. Ed. (Henfield); Alex. Paterson, M.D. (Bahia); and W. B. Slayter, M.D. (Halifax, Nova Scotia).

The following gentlemen were proposed for election:—Dr. James Henry Clark; Dr. George Hoggan; Dr. Thomas Pigg; and Dr. William Thompson.

Report of Sub-Committee on Dr. Clement Godson's specimen of Acephalous Embryo.

The Acephalous Embryo, exhibited by Dr. Clement Godson at the last meeting of the Society, measured in length about two inches, in width, at the upper part of the trunk, about three fourths of an inch. The lower extremities were developed, but the head, upper extremities, and upper part of the trunk were wanting.

It presented no data from which its age could be determined, but its twin embryo appeared to have reached the third month of intra-uterine life.

The upper surface of the trunk sloped gently from the anterior border, backwards, and upwards; at the posterior border was a slight ridge, similar to a margin of skin around a recent cicatrix. The upper surface was generally smooth, but near its posterior border was a small, rough, hard tubercle, which projected beyond the surrounding surface. On dissection this was found to be continuous with the vertebral column, and to form the termination of that structure. On the right side were five ribs, on the left four.

There was a diaphragm, and above it was a small cavity whose contents, which were more or less adherent to the walls, were probably remains of heart and lungs.

The upper surfaces of trunks of acephalous fœtuses form usually round, smooth, loose sacs; they have no prolongation of the vertebral column into them and through them, as was found in Dr. Godson's specimen; they have also a continuation of the skin over them without interruption, or alteration of structure, but in the specimen under consideration there was a slight ridge, indicating the junction of the covering of the posterior with that of the upper surface of the trunk.

The existence of this ridge, together with the prolongation of the vertebral column beyond the upper surface of the trunk, lead your sub-committee to regard the acephalous condition as the result of amputation.

JOHN WILLIAMS.
CLEMENT GODSON.

Dr. DALY, of Dalston, exhibited the uterus of a patient which was occupied by a tumour the size of a large orange; there was also attached a small ovarian cyst, on the left side, about as large as a small orange. He remarked that the case of the lady from whom he had removed this specimen possessed special interest, as she had been seen during

life, by more than one fellow of the Society. The late Dr. Tyler Smith had removed a polypus from the uterus some years back. Twelve months back she came under the care of Dr. Daly; she was then flooding profusely; the use of ice, with large doses of gallic acid, and the recumbent posture, quickly stopped the hæmorrhage. On then making a vaginal examination the uterus was found to be immovably fixed in the pelvis, the os being tilted up, and looking back, directly towards the sacrum. The entire pelvic brim seemed to be filled by a tumour; the area of the tumour was easily defined by percussion through the abdominal walls; it impinged upon the rectum, sometimes causing the most distressing constipation, requiring enemata.

During the past twelve months she had three attacks of alarming hæmorrhage, coming on quite suddenly, but gallic acid and ice were sufficient to control them. Ergot of rye occasioned dreadful sickness. Between the attacks of hæmorrhage there was profuse and continual fœtid discharges from the uterus, and for the last four months more or less persistent vomiting; indeed, vomiting continually was the immediate cause of death. Nothing really could control the sickness. Ice, champagne, effervescing medicine, with hydrocyanic acid, bismuth, morphia, all alike were brought up; occasionally for a day the sickness was less, but only to return again as badly as ever. She was emaciated like one in the last stage of phthisis, but the feet, legs, and thighs became occasionally much œdematous from the pressure of the tumour. Dr. Daly regretted that Dr. Wynn Williams was not present, as he saw the patient on the 18th of last April, in consultation with him. Dr. Wynn Williams then suggested the application of perchloride of iron and glycerine, on lint, to the os uteri, and the free injection of a dilute solution of the perchloride of iron in water, should the hæmorrhage return, but as the hæmorrhage never after returned this was not required. Dr. Wynn Williams also advised trying bismuth for the sickness, but it rather increased it than otherwise, as all medicine seemed to do. Dr. Wynn Williams further advised that every endeavour should

be made to improve the patient's general condition, when he proposed to divide the os uteri, and if possible endeavour to remove the tumour, as he did not believe that it was malignant. In this opinion Dr. Daly did not coincide, and although some of the patient's friends were most anxious for the operation, the patient herself, acting on Dr. Daly's advice, refused to admit. She died of exhaustion on the 2nd of June, and the post-mortem, made seventeen hours after death, was confined to the pelvis, and disclosed the state of parts exhibited to the Society.

Dr. PLAYFAIR thought it seemed to be a fibroid growth, with malignant degeneration.

Dr. GODSON inquired as to the character of the discharge, the presence of pain, and the fixity of the uterus—points which would throw light upon the diagnosis.

Dr. HAYES asked what was the condition of the other abdominal organs?

Dr. ROUTH suggested a microscopical examination of a section of the tumour.

Dr. BRUNTON inquired if ergot had been tried.

Dr. DALY, in reply, stated that the uterus was fixed; the discharge was watery and offensive, and the pain not as severe as usually met with in cancer. There was no cancerous infiltration; the bladder and rectum were not involved, though the latter was interfered with by the pressure of the tumour.

The PRESIDENT referred the specimen to Dr. Hayes and Dr. Potter for further examination.

The PRESIDENT exhibited for Dr. Campbell Maclean a specimen and photograph of a fœtus with the placenta attached to the head. The following are Dr. Maclean's notes.

"Mrs. T—, æt. 28, has had six children, all of whom but *one* died in infancy, although well formed. About two years ago was delivered of a stillborn child well formed. During her last pregnancy she noticed nothing more than usual except that for two days before labour set in the movements of the child were very strong and troublesome. Labour set in at about 10 p.m. on the 29th. I was called

in at seven o'clock the following morning, when I found pains coming on regularly and strongly.

"On examination I found the membranes presenting in a bag which I ruptured, allowing the liquor amnii to escape, which was about twice the usual quantity; the intestines with the liver of the child then protruded, and with the next pain the child was expelled, the head with placenta attached coming last; there was no hæmorrhage nor any other bad symptom, and the patient is doing remarkably well."

Dr. Aveling suggested that it was a meningocele which had ruptured in utero.

Dr. John Williams exhibited a specimen of calcified fibroids of the uterus, the growths being distinct and well marked.

Dr. Edis referred to a similar case, though somewhat more advanced, that he had exhibited to the Society in February, 1869, where some of them had commenced to slough, the patient dying from exhaustion.

SOME REMARKS ON A NEW PESSARY AND INTRA-UTERINE STEM FOR THE RELIEF OF FLEXIONS AND DISPLACEMENTS OF THE UTERUS.

By Wm. Ross Jordan,

SURGEON TO THE HOSPITAL FOR WOMEN, BIRMINGHAM.

The intra-uterine stem and vaginal pessary which I now bring before you is a simple stem of vulcanite fitted into an inflatable ball or pad, the principal peculiarity being that it has no tube attached. It is inflated by inserting a movable metal tube into a valve, injecting the air, and slightly rotating the tube, which closes the valve and is then removed, leaving the pad permanently distended to

any required extent. The pads may be made without the stem.

Modifications of form may be obtained by altering the situation of the stem nearer to or further from the valve.

The introduction of the simple pad is very easy; it may be passed into the vagina of a single woman without giving pain, if there is room for examination, It is only necessary to press out the air, fold it up, and take hold of it with a pair of long forceps, with the upper blade of the forceps under the loop, so that the tip of the finger may be put into it to steady the pessary during the process of inflation. The introduction of the stem and pad must be accomplished in a similar manner, taking care to fold up the pad, and take hold of it so as to keep the stem in the proper axis for passing into the cervix.

The advantages in this pessary are all that can be claimed for the old ball and tube: it has the flexibility and softness without the tendency to escape, which the presence of the tube encouraged in the old one. The other advantages are many:—1st, and most obvious, the absence of the tube removes a source of much annoyance to the patient's mind, and a frequent cause of painful irritation to the vulva; 2nd, it insures its constant use, as it cannot be removed at the caprice of the patient; 3rd, whilst the stem keeps the uterus in its proper position and form, the elasticity of the pad or ball allows all the freedom of movement to the uterus which nature can possibly require; 4th, the pad can be distended to any degree, and need not cause over-distension of the vagina; 5th, the pad being perfectly soft gives a comfortable support to the cervix, avoiding the pain sometimes caused by the hard and inflexible vulcanite pessaries; 6th, it cures the flexion without simply changing it into a version.

It may be used in all cases where vaginal support is required, but should never be employed if a Hodge or Dr. Greenhalgh's modification will answer the purpose. Although it may possibly prove a slight obstruction to coitus, it will not prevent the function being performed.

There is no necessity to *fill* the pad with air; as soon as it is sufficiently inflated to support the stem I find it is retained. I used the first I had made for a young lady; in fact, it was on her account I contrived it, as I could get nothing to answer. She had a very painful anteflexion, and being far advanced into consumption her violent cough expelled everything, even Dr. Graily Hewitt's padlock, which I have used in many cases with great advantage. This poor creature derived great comfort from its use; it was only once expelled during the months she wore it.

Dr. EDIS thought it was a very ingenious arrangement, but doubted whether it would be prudent in married patients to allow coitus, as the intra-uterine stem, being pressed against the fundus, might cause injury to the uterus.

Dr. BARNES reported that in Dr. Kesteven's specimen, exhibited at the last meeting of the Society, there was no fluid in the post-cranial bag—there was nothing, in fact, to add to the description already given.

Report on specimen exhibited on May 6th, 1874, by Dr. Hayes.

We further examined the specimen referred to us of malignant disease, and though a considerable portion of it was contained between the folds of the broad ligament, yet the site of its origin, whether in that situation or from the pelvic walls, there is not sufficient evidence to prove.

HEYWOOD SMITH.

SEPARATION OF THE GREATER PORTION OF CERVIX UTERI DURING LABOUR.

By Robert Gray, L.K.Q.C.P.I.,
MEDICAL OFFICER, ARMAGH DISPENSARY.

On the 9th September, 1873, I was requested to visit a poor woman, æt. 30, whom on inquiry I learned had been in labour of her second child about twelve hours. On my arrival I found her in strong throes of labour; the liquor amnii had escaped; her tongue was but slightly covered with a white fur; skin covered with perspiration; bowels and bladder had been relieved; pulse 104; her general appearance and condition was fair. She told me that she was a traveller, accompanying her husband from town to town, and on this morning, on which she was taken in labour, she had endeavoured to make her way to the Union Hospital to be confined there, but owing to the severity of the pains failed to do so, and had then obtained the services of a midwife, who, after sitting with her for some time, began to fear that something was wrong, as the birth did not take place, although the woman had very strong pains. I was then sent for. On making a vaginal examination I found the head about half way through the pelvis, surrounded, however, by about half or three quarters of an inch of the anterior portion of the cervix uteri, which was thick, soft, and congested. It had a pulpy feel to the touch, much like the feel of solid clot of blood. Passing round to the posterior portion it was separated from the body, having a ragged, uneven margin of separation; there was a slight oozing of blood from the vagina; in short, there had been a ring of the cervix (about half an inch) torn almost completely off, except the portion holding the body and cervix together anteriorly.

Believing with those who consider that immediate delivery, if practicable, is the most likely to be followed by a favorable result, and having emptied the bladder and bowels

of their contents, I then gently drew out of the vagina the separated portion, and having placed her in the most convenient position carefully applied the forceps, and with very slight effort succeeded in delivering her of a living child. Immediately after delivery I gave her a full dose of opium and ext. ergot. I should have mentioned that she had had almost incessant vomiting during the day, without, however, any marked symptoms of collapse; she was very much exhausted, but I attributed that more to the intensity and persistence of the pains and vomiting than to the effect of shock from laceration. I also ordered that she should be kept perfectly quiet, and in the course of an hour I again visited her. The pulse had sunk to 88; no hæmorrhage; there was good contraction; skin moist, but no more, and she expressed herself as feeling comfortable; no tenderness above pubis, except that she felt a "smarting inside the vagina." I desired the midwife to have the vagina syringed out with a tepid injection containing permanganate of potash every three or four hours, and next day gave her a mixture containing chlorate of potash and bark (decoction with tincture) during eight days in which she was under my observation. The pulse only sank to 80; the temperature remained almost steadily at 96°, without a single unfavorable symptom arising during that time, after which she passed from my notice. At the end of three weeks, however, she presented herself at the dispensary to have the birth of the child registered, at which time she said that she had nothing whatever to complain of except slight weakness.

I forgot to mention that the attached part completely separated on the fourth day, and that occasionally, as I considered she required it, gave her a dose of opium, but not a particle of calomel. The child was a male not over average size; the only cause I could assign for the laceration was pressure on the cervix between the head and pelvis; the ligaments seemed ossified and contracted in the lateral diameter.

ON LYMPHANGITIS IN PELVIC PATHOLOGY.

By Edward John Tilt, M.D.

"Les phlegmasies aigues ou chroniques, les ulcérations, les altérations de tout genre, dont les membranes muqueuses peuvent être le siége, sont une source fréquente et souvent méconnue de l'engorgement des ganglions lymphatiques."—Ollivier d'Anger, *Dict. de Médecine*, vol. xviii.

"Quant s'angioleucite sera mieux connu, elle expliquera bien des maladies des viscères."—Velpeau, *Archives Générales de Médecine.*

In a paper on pelvic pathology, published in the fifteenth volume of our 'Transactions,' I tried to ascertain the various causes of pelvi-peritonitis, and I stated, that not unfrequently on opening a body, we found no disease of the womb or of the ovaries to explain peritonitis, which reached its height in that portion of the peritoneum that surrounded an acutely inflamed oviduct. When the inflamed infundibulum is thus the centre of peritonitis, I have no hesitation in saying that both diseases are the result of pelvic lymphangitis. This is the missing link in the chain of morbid pelvic phenomena to which I promised to draw your attention at some future time.

It is indeed high time to review what is known of lymphangitis in connection with pelvic diseases, if we still further wish to advance gynæcology; and I propose to lay before you what I know of a disease, that has been called *lymphangitis, lymphite* or angioleucite, and to which I shall usually give the first of these names.

Beyond the fact that lymphatics are the chief organs of absorption, and that from the depths of our tissues they draw all intercellular fluids into the veins, and may occasionally convey poison to lymphatic glands, little is generally known about the absorbents.

Perhaps some of you have never seen a lymphatic vessel, or dissected an acutely inflamed one, so it would be useless entering on the object of this paper without some preliminary remarks.

Although Mascagni's magnificent work displayed the abundance of lymphatics in all the tissues of the body, and that these vessels originated in the interstices of the tissues, it was reserved for Recklinghausen, Ranvier, Dr. Klein, and others to show the manner in which capillary lymphatics spring out of that lymph-canalicular system which has been found wherever connective tissue pervades, and is most apparent in subserous cellular tissue, where it consists of too intricate a labyrinth of irregularly shaped spaces and canals lined by cell-plates not to serve some definite purpose.

The capillary lymphatics can be distinguished from the lymph spaces by the former having well-defined walls, lined by a differently shaped endothelium. Such is the structure of the subperitoneal cellular tissue, which is moreover traversed by lymphatic vessels lying close to the serous membrane, and running up to the lumbar lymphatic glands, and from these lymphatics, and perpendicularly to them, start numerous smaller ones, which abut upon the peritoneum. With regard to the physiology of the lymphatic system, there must be some free and easy mode of communication between the peritoneum and the lymphatics, or we should not find them coloured blue, three hours after water holding Prussian blue in suspension, has been injected into the peritoneal cavity of an animal, and it has been well established to the satisfaction of such men as Recklinghausen and Dr. Burdon Sanderson that the short perpendicular lymphatics just mentioned open upon the free surface of the peritoneum by veritable stomata. Dr. Klein also asserts that besides the stomata vera there are pseudo-stomata, or *slits* leading from the free surface of the peritoneum into the intercanalicular lymph system. The same indefatigable worker claims to have made out that the peritoneum is abundantly studded with patches, standing out in relief from the serous membrane. Dr. Klein has shown me that these patches are distinctly covered with cells, five or six times smaller than those paving the rest of the peritoneum, but of the same

shape. He maintains that the cells proliferated by these patches are true lymph-corpuscles, that they pass through the stomata into the lymphatics, and are by them carried into the blood-vessels, where we recognise them as white blood-corpuscles. If this teaching become accepted, it will modify our theories of puerperal fever, for one of the effects of septicæmia on the peritoneum is to increase the proliferating power of these patches, and therefore to crowd the blood with lymph-corpuscles. Admiration for Mascagni's work published in 1757 led to many premature attempts to ask of the lymphatic system to explain disease. Without any pretension to a thorough knowledge of the bibliography of diseases of the lymphatic system, I believe they only began to be seriously studied, first in 1816, by Ribes, and then by Allard and Andral, in 1824, and by Velpeau in 1835, while an epidemic of puerperal lymphangitis, at the great Paris maternity, in 1827, enabled Cruveilhier to well describe and pourtray it. Notwithstanding the light thus thrown on lymphangitis, Boivin and Duges strongly contended that the lactiform pus, they had seen distending the lymphatics, and passing into the thoracic duct had been merely *absorbed* by the lymphatics.

During the last thirty years Blandin, and many subsequent Paris observers, have studied clinically and microscopically the relations of lymphangitis with erysipelas, with throat affections and with diffusive inflammation of the cellular tissue, but it occurred to no one to study the every day relations of lymphangitis to pelvic pathology until 1870, when this was done by a young Paris doctor, Lucas Championière, in a very remarkable thesis. His views and statements have been amply confirmed by several of his colleagues in the Paris hospitals, Drs. Fontanes, Quinquand, and D'Espine, and they have been to a certain extent sanctioned by Dr. Gallard. Their works are in our library, and I refer you to them, because you will find little or nothing about sporadic puerperal lymphangitis, in our best works on puerperal dis-

eases. Dr. Fordyce Barker does not even mention it, as being, like phlebitis, a cause of puerperal fever. In like manner you will find little or nothing about the relations of lymphangitis to pelvic pathology in the most recent works on gynæcology. Dr. Courty does not discuss the subject, and Dr. Barnes only glances at it, in treating of pelvic cellulitis and cancer.

You will not, I am sure, think that I now propose to sap your belief, in the superior importance of phlebitis as a pathological factor, but I shall be able to convince you that lymphangitis has been undervalued and often unrecognised, ever since the two kindred affections were first well studied. You will remember that while Cruveilhier was investigating lymphangitis, Dance was demonstrating the vast importance of phlebitis. This afforded so satisfactory an explanation of many diseases, and it was so comparatively easy to demonstrate the anatomical lesions of phlebitis, that it became recognised as the best explanation of a host of morbid phenomena. On finding post-mortem evidence of phlebitis, the pathologist did not look for lymphangitis which often coexists; *pus* in small lymphatics was overlooked, and when met with in large lymphatics, they have been actually mistaken for veins.

Instead of seeking in the lymphatics for such lesions as would supplement, what could not be quite explained by phlebitis, the pathologist of forty years ago settled obscurities by ascribing them to capillary phlebitis. Whether I also attach too much importance to capillary lymphangitis is for you to decide.[1]

[1] Pathologists are now looking to the lymphatic system for the earliest starting-point of certain general diseases. Thus, in the discussion on tubercle at the Pathological Society of London in 1873, Dr. Wilson Fox considered tuberculosis to originate in some morbid condition of the lymphatic capillaries. During the discussion on cancer at the same society, in 1874, Mr. Rivington expressed his belief that cancer was "the highest form of expression of lymphatic incapacity." Those who believe with me that cellular tissue is extensively permeated by a lymph-canalicular system, will think Mr. Rivington's opinion supported by Dr. Wilks, for he teaches "that cancer affects more

One result of this inquiry is to bring some of the diseases we gynæcologists more particularly study within the range of the laws of general pathology, so it is well to start from facts admitted by all pathologists.

1stly. Any cutaneous lesion, specific or not, may lead to lymphangitis; and I may add, that although the same kind of lesion may lead, in the same patient, both to lymphangitis and to erysipelas, and although the latter often causes lymphangitis, the two can only be considered as kindred affections, for it has not been made clear that erysipelas is merely inflammation of the ultimate reticulations of the cutaneous lymphatics.

2ndly. Any lesion, specific or not, of any mucous membrane may lead to inflammation of the surrounding lymphatics, and of the glands to which they converge, and in many cases, it is only by the swelling of the glands, that we can say for certain, that the lymphatics of the mucous membrane have been inflamed, by a mucous membrane sore, or by the unknown causes of influenza, diphtheria, or scarlatina. Without denying that inflammation may possibly originate in a gland, the suppuration of a gland and of its surrounding cellular tissue may be generally traced to a diseased lymphatic, starting from some lesion of skin or of mucous membranne.

From this starting-point in general pathology I shall ask you to review what you know of pelvic pathology, by the light of sundry facts that may not have come to your knowledge, and to admit with me that lymphangitis may be benign or septicæmic; that this may be traumatic or puerperal; and that septicæmic lymphangitis may also be blenorrhagic or syphilitic. I shall also attempt to show you that a chain of lymphatics, benignly so, or poisonously, may so distinctly cause certain lesions, as to warrant my calling them the primary lesions of lymphangitis, I mean

particularly the cellular tissue, in connection with the skin and with the mucous membranes," just the parts where the lymph-spaces are known to be best organized; and Dr. Wilks adds "that the viscera and most tissues of the body are not primarily attacked by cancer."

cellulitis, pelvic buboes, and peritonitis. Some other diseases, such as the inflammation of other serous membranes, of the synovial membranes, and of the spleen, are clearly traceable to one or other variety of lymphangitis, but as it only does so indirectly, I propose to call these lesions the secondary lesions of lymphangitis.

This will be made clearer by the following schema:

- Lymphangitis
  - Benign
  - Septicæmic
    - Ichorhæmic
      - Traumatic.
      - Puerperal.
    - Blenorhagic.
    - Syphilitic.
    - Cancerous.
- Lesions of lymphangitis
  - Primary
    - Cellulitis
      - Peri-uterine inflammation.
      - Pelvic abscess.
      - Iliac abscess.
    - Pelvic buboes.
    - Peritonitis.
    - Ovaritis.
    - Salpingitis.
  - Secondary
    - Inflammation of serous membrane.
    - Inflammation of synovial membrane
    - Inflammation of spleen.

The disposition of the pelvic lymphatics deserves careful consideration; their abundance is so great, that Soemmering and Cruveilhier thereby explained the early and constant spread of cancer from the womb to the pelvic glands, and, as with all lymphatics, there is no constancy in their arrangement. Some of the lymphatics of the labia go to the inguinal glands, others unite with those of the vagina and of the cervix, to form the large lymphatics that accompany the blood-vessels always to be found on each side of the womb, in which lymphatics, pus is more frequently found than in any others. Dr. Championière has pointed out the very frequent occurrence of one or several small glands, in the midst of these vessels, at the union of the body and the neck of the womb, and that in their absence, the lymphatics are unusually numerous. These lateral lymphatics go to the broad ligaments, and they there reach those lymphatic glands they not unfrequently disease.

In continuation with the vessels just described, other

lymphatics coming from the body of the womb, form with blood-vessels, an abundant plexus along side of the body of the womb; to them unite the lymphatics coming from the ovaries and from the oviducts, and in the midst of the tangled web they form round the utero-ovarian blood-vessels, Dr. Championière has often noticed several small glands. The pelvic lymphatics increase in size as they reach the lumbar ganglia, and they have occasionally been seen opening into the azygos vein and into the thoracic vein.

The best description of the lymphatics of the unimpregnated womb is due to Dr. G. Leopold, which I adopt, to a great extent, from the April number of the 'London Obstetrical Journal.'

1. *The mucous membrane.*—The mucous membrane is made up of a framework of the finest connective tissue, the bundles of which are covered by endothelium; the spaces between these bundles are lymph-spaces or lacuniform system. The membrane of the uterine glands consists, in the deeper layers, of a fine layer of delicate connective tissue, the bundles of which externally are covered by endothelium; but superficially it is formed only by a sheath made up of cell-plates. The blood-vessels, from the finest capillaries, have a number of fine endothelial sheaths, increasing with their size. The framework of this connective tissue is directly connected with both kinds of sheaths by means of fine twigs. The glands and blood-vessels, therefore, pass through the lymph-spaces, from which they are separated only by their sheaths of connective tissue. At the limits of the muscular layer, the lymph-spaces extend a little into the funnel-shaped hollows, between two muscular bundles, and gradually become narrowed into the intermuscular lymph-vessels and spaces.

2. *The muscular layer.*—In the muscular layer there are lymph-vessels and lymph-spaces. The walls of both are made up of fine intermuscular connective tissue; the former being lined by fine endothelial *lamellæ*, which here and there have openings and gaps; the latter are lined by

delicate cell-plates. The lymph-spaces are most abundant in the external layer, and in the other layers around the larger vessels, and are not connected, as in animals, with vessels of the subserous layer, but with those of the mucous layer, mostly by the lymph-spaces. They unite together in the external layer, especially on the sides of the uterus, to form large canals, which very probably have valves; at all events, when distended by pus, they often become varicose, above the junction of one vessel with another, and after the obliteration of the narrow portions of the vessels, these lymphatic junctions round themselves and are not unfrequently found on cutting up the womb as intermuscular abscesses, varying in size from that of a lentil to that of a filbert, with a shiny smooth lining that betrays their lymphatic origin; so these little abscesses may be considered to be indisputable witnesses to previous lymphangitis.

To return to the lymph-spaces, they have been seen to surround the smaller bundles of a larger muscular bundle, and to communicate directly with the submucous layer of lymphatics. The larger blood-vessels lie for the most part close to the collecting lymph-canals; the other lymph-vessels are accompanied by blood-vessels for a certain distance, and small vessels are frequently found invaginated in the lymph-spaces.

3. The lymphatics found under the serous membrane of the womb, lie in the subserous connective tissue, forming large networks, but they are much less numerous than the subserous blood-vessels that overlie them. They have large ampullæ or varicose swellings above the valves and lymphatic junctions, and they give off branches to the deeper parts, either vertically or at an angle. These networks cover the anterior and posterior aspects of the womb in large or small irregular groups, forming large ampullæ at the insertion of the Fallopian tubes, and they cover these tubes with an intricate network of vessels.

With the knowledge that pregnancy enormously develops these pelvic lymphatics, so much so that when fully

injected they form a complete sheath to the womb and the oviducts, we are now prepared to study the effects of inflammation on these vessels.

Anatomical lesions.—Gynæcologists are far better off than other pathologists; the organs we study have a double pathology, and during pregnancy, nature so magnifies the several constituents of the sexual organs, that in the puerperal state we can clearly see what is less manifest when the unimpregnated sexual organs are inflamed; and as puerperal ovaritis taught us to know ovaritis, so puerperal lymphangitis will teach us the part played by lymphangitis in pelvic pathology.

In 1829, Dr. Robert Lee was one of the first to describe puerperal lymphangitis in the 'Transactions of the Royal Medical Chirurgical Society,' but a full knowledge of puerperal lymphangitis can only be obtained from those vast continental maternities where women die that science may be advanced.

In 1828 there raged at the Paris Maternity an epidemy of this description that lasted many years and was well studied, first by Cruveilhier and then by Tonellé and Duplay. Botrel has likewise described with great care, two disastrous epidemics that occurred at the Hôtel-Dieu of Rennes in 1842-44. The lymphatic lesions common to these epidemics only differ in degree, from what may be observed any day in a sporadic case of puerperal lymphangitis, and by combining the knowledge thus obtained with recent investigations of German and of French pathologists you will have a correct notion of the effects of lymphangitis on the pelvic organs of women.

I shall first describe the results of inflammation on the lymphatic vessels themselves, and then show how lymphangitis causes its primary and secondary lesions.

Lymphangitis.—You can get a capital notion of the disease under its worst form by looking at the Plates I, II, and III of the 13th livraison of Cruveilhier's 'Pathological Anatomy.' Plate III exhibits the womb of a recently confined woman, from which a thin layer of muscular tissue

has been removed to show the enormously distended lymphatics with which the womb is covered so as to give it a yellow colour. These flattened vessels contract at many points to dilate at others, and above their valves and the junctions of one vessel with another are ampular distensions of a somewhat triangular shape. You will see how very abundant are the distended lymphatics on each side of the womb, and how they seem to fill the space between the ovaries and the round ligaments. If you puncture a distended lymphatic it collapses and escapes from view, unless its texture be much damaged, or unless the peri-lymphatic cellular tissue be hardened, which very frequently occurs. Slit open an inflamed lymphatic and you find it full of creamy pus; it may be found slightly tinged with blood, but if the pus be decidedly sanious, it is a vein you are handling. On removing the pus you will find that the lymphatic has lost its transparency and that it has a milky or a pearly aspect, and it is more frequently permeated by capillary vessels than is stated. By experimenting on animals it can be ascertained that the earliest stage of inflammation is characterised by considerable distension of the vessels by germinating endothelial cells, but when pathologists have an opportunity of examining an inflamed lymphatic, the endothelial cells are found removed by patches, or entirely removed for a considerable length, and the inside of the vessel has been found roughened. The purulent contents of the vessel have been differently described; thus Dr. Heiberg, of Christiania, has lately described them as of a greyish-white colour, and containing very numerous bacteria and fat-corpuscles in a fatty emulsion; but Dr. Quinquand and other Paris observers make no mention of bacteriæ, and find the pus to be made up of leucocytes and lymphoid bodies in a granulo-fatty fluid. Such, however, is the similarity of pus, whatever its origin, that the microscopist cannot differentiate the pus coming from a lymphatic from that resulting from the suppuration of a fibrin clot in a small vein, and it is better to rely on the striking difference that exists between the walls of

inflamed veins and lymphatics to distinguish between the two. The walls of inflamed veins are much thicker than those of lymphatics; they are much more richly injected and do not break down so easily as do those of inflamed lymphatics, so soon as they are touched. You know that normal lymph contains no fibro-plastic material, and that lymphatic fibrin does not coagulate spontaneously, but it does so under the influence of disease, and the inflamed lymphatics sometimes contain pale clots, already noticed by Cruveilhier, but more carefully studied by Virchow and Klebs under the name of puerperal lymphatic thrombosis, and doubtless lymphatic pus is sometimes due to the disintegration of a lymphatic clot. Before dismissing the subject of lymphatic thrombosis I will remind you that Dr. Tilbury Fox[1] has sought to restore to the lymphatics the production of phlegmasia alba dolens, but I am not prepared to say how far he is right in attributing this disease to some kind of lymphatic thrombosis.

The shiny delicate walls of the deeply-placed intermuscular lymphatics often prevent their being seen unless they be distended with pus, and its creamy drops will be seen to ooze out from vertical sections of the womb near its angles. Careful dissection sometimes brings to light collections of about a teaspoonful of pus at the junction of two lymphatic vessels, and I have no doubt that Dr. Championière is

[1] I had not perused Dr. Tilbury Fox's interesting papers, or I should have mentioned his having clearly made out that to bring on phlegmasia dolens, besides venous obstruction, there must be some disease in the lymphatics. He points out that in connection with phlegmasia dolens there is generally some pathological condition in which disease of the absorbents is well known to originate, such as the retention in the womb of some part of a decomposing placenta or ovum, or some ulceration of a mucous membrane, bathing in foul secretion, after the removal of polypi, and hemorrhoids, on the disintegration of tubercle and cancer. Dr. T. Fox argues that the poison absorbed by the lymphatics may not be virulent enough to inflame them, and still so act in them as to determine the coagulation of the lymph contained in the lymphatics, even in their minute cuticular reticulations. Dr. T. Fox has moreover reminded us that Abernethy and Dr. James Johnson have recorded cases in which the phlegmasia dolens was evidently caused by inflammation of the lymphatics, the veins presenting no appearance of disease.

right in admitting that these lymphatic collections of pus account for the little round intermuscular uterine abscesses, whose shiny walls betray their lymphatic origin, made clearer by the previous history of a bad getting up or a bad miscarriage. Whether lymphangitis be simple or septic the lesions are the same, but more extensively spread in the latter, than in the former. This inflamed lymphatic can often be traced to some well-marked lesion of the utero-vaginal mucous membrane, as easily as you trace brachial lymphangitis to a cut finger, or swelled axillary glands to a sore nipple. "Whatever be the seat of the uterine lesion," says Dr. Botrel, "if the specimen be fresh, it is easy to see the distended lymphatics arising from some bruised, or torn, or ulcerated part of the womb, and to follow them to the broad ligaments and to the peritoneum. The lesion may be found at any part of the womb, but I have more particularly found it at the cervix, for lymphangitis and peritonitis are rather caused by lesions of the cervix than by those of the body of the womb." Chomel had already noticed the frequency of cervical lesions, after death from abscesses of the broad ligament, and these facts are explained by the abundance of cervical lymphatics. Both Championière and Botrel say they have often traced lymphangitis to an irregular rent (déchirure anfractueuse) in the circular fibres of the os internum, which is opposite the lymphatic glands, of which the last-named observer knew nothing. He has often traced lymphangitis to placental ulceration, or to that part of the womb which had long remained in contact with a bit of putrid placenta, and if the lesion was distinctly lateral, he always found lymphangitis was on the same side. Dr. D'Espine may exaggerate when he states that parturition is almost always attended by rupture of the cervix, leaving ineffaceable traces; but this lesion is frequent, as well as bruising and abrasion of the cervix. I do not know whether Dr. Fordyce Barker is right in stating, that in the primiparous the "fourchette" is always torn, but we must admit with Schroeden and Buhl that this is the rule, and these facts

tally with the well-known frequency of abscesses of the broad ligament in the primiparous. So you see there is no lack of peripheral lesions to explain the origin of lymphangitis, even if no additional lesions be caused by unskilful operative midwifery.

Now I will attempt to show you how one acutely inflamed lymphatic may spread inflammation to its surrounding cellular tissue, to the lymphatic gland it ministers to, to the peritoneum it underlies, and even to the oviduct and ovary.

Primary lesions of lymphangitis.

1st. *Cellulitis.*—Any marked impediment to the return of lymph to the veins, so distends the lymph spaces, now known to exist wherever there be cellular tissue, that lymph and lymph-cells become extravasated, and this state of œdema may last for years without the supervention of inflammation. Even that peculiar kind of œdema—phlegmasia dolens—that comes on after parturition, as the double result of hyperinosis and some pelvic obstruction to pelvic circulation, may not depend on inflammation, for in a few days all swelling of the limb may disappear. Nevertheless cellulitis is of common occurrence, and when an inflamed lymphatic does not collapse, this depends on the hardening of its surrounding cellular tissue by inflammation. When this is subacutely inflamed, the cellular tissue can be torn, and, when crushed, the hardness is seen to depend on its infiltration by transparent or bloody serum. This is œdema, *plus* inflammation or subacute œdema. When the crushed hardness gives a lactescent serum, this is acute cellulitis or acute œdema, and it often becomes frankly purulent and is known as "diffusive inflammation of the cellular tissue," the acute purulent œdema of Pirogoff.

All these varieties of cellulitis are frequently caused by the inflammation of the lymphatic capillaries and the neighbouring lymph spaces. It is almost impossible to

demonstrate this on a morbid specimen, as there is too great a want of cohesion of the tissues to permit the injection of their lymphatics, but much might be done by experimental researches on animals.

In Dr. Klein's work on the lymphatic system, he mentions having caused inflammatory œdema of the subperitoneal tissue of the omentum in a guinea-pig, by injecting a septic fluid into its abdominal cavity; and that when, two days later, he killed the animal, he found this subacute subserous œdema made up of very transparent bundles of connective tissue, separated from each other by unusually wide lymph spaces. The lymph-canalicular cells and those of the vertical lymphatics that open on the peritoneum had become larger, their nuclei being in the act of division, and in the midst of these young cells were lymphoid bodies, migratory cells, white and red blood-corpuscles, colouring the tissue red. These appearances confirm Simpson's assertion that cellulitis begins by œdema, and that subperitoneal œdema is frequently found in intestinal peritonitis, and it would be well if some one would ascertain experimentally how long it takes for the contents of lymphatic capillaries and lymph spaces to become purulent, and for œdema to pass from a subacute to an acute stage of inflammation.

This is a *cellulitis unit*—the same disease—in whatever part of the body you meet it, although its history will vary according to the variable quantity of cellular tissue, in any particular spot and according to the manner in which this connective tissue is circumscribed by bone, fascia, muscle, or viscus. Cellulitis is the same disease, whether you feel it surrounding brachial lymphangitis, or on one side of the uterus as periuterine inflammation, or as a swelling in the broad ligament, or as diffusive inflammation, spreading under the peritoneum, to cause iliac abscess. Besides that ruban-like line of cellulitis, in which an inflamed brachial lymphatic lies imbedded, its line of march is sometimes marked by one or more round patches of more or less hardened cellular tissue an inch or two in diameter, and the same kind of hardness may be met with in the early

stage of pelvic cellulitis, when the vagina gives the sensation of being backed by a puffy or brawny substance. Too often in both diseases this phlegmonous inflammation ends in suppuration, and when pus finds a vent the surgeon is often surprised at the quantity of pus that long continues to drain away; this can, however, be accounted for by the fact of his having tapped the surrounding lymph-canalicular system to which inflammation had extended. In the same way the insertion of a needle into an anasarcous limb is followed by a flow of serum that may continue for days. Diffusive inflammation of the cellular tissue may be caused by phlebitis, but it is often unquestionably the result of lymphangitis, and I do not suppose another book will be written on "parametritis and perimetritis" without discussing their relation to lymphangitis.[1]

I said the hardness of cellular tissue speedily ended by resolution or suppuration, but there is a more uncommon kind of induration of the cellular tissue of the broad ligaments that may last many years. It was first described by Simpson, who well noted its semicartilaginous consistency and deal-board hardness. Hervieux calls it hypertrophic engorgement, but under the microscope it is seen to depend upon a fibro-albuminous deposit. Hervieux thinks it is the result of phlebitis, because inflamed veins have been found in the neighbourhood of the hard substance. This is questionable; neither do I believe it to depend on lymphangitis, because inflamed lymphatics have been found in its vicinity.

Simple cellulitis in a sound constitution may not be a serious disease, but septic cellulitis is a most formidable one. It may be an exaggeration to say that the whole connective tissue is one vast lymphatic sac, but there is no connective tissue without lymph spaces, and there are certainly extensive labyrinths of cell-clothed lymphatic canals, under all mucous and serous membranes, and when the

[1] A similar train of reasoning makes me believe that the part taken by the lymphatic capillaries and lymph spaces in the process of nutrition will henceforth have to be taken into consideration by those who write on obesity.

uterine submucous and the subperitoneal canalicular systems become extensively inflamed, so much pus may be sent into the blood that the patient has been stricken down in twenty-four hours after parturition. If in a case of epidemic lymphangitis, like those represented by Cruveilhier, you sometimes find little pus in the pelvic cellular tissue, it is that the lymphatic capillaries and the lymph-canalicular system have forwarded their contingent to the larger lymphatics, and it is in part their pus that is found so fully distending the large lymphatics of the sexual organs after death.

I shall only allude to that variety of cellulitis, that goes by the name of periuterine inflammation, for, although rare compared to pelvi-peritonitis, it cannot be contested, or by what name are we to designate the hardened cellular tissue infiltrated with pus and blood which had been found by Aran and others, along side of the womb, where vessels are abundant? Whether or not such a lesion generally depends on lymphangitis, we shall only know when fresh observers have looked for it in similar cases. In one case Dr. Championière found the hardened periuterine cellular tissue surrounding a distinctly inflamed lymphatic vessel, so in that instance periuterine inflammation was lymphangitis *plus* cellulitis, but, as I said, we must wait till the matter shall have been reported on, by those who will take the trouble to look.

2ndly. *Internal or pelvic buboes.*—If from the pudenda a poison can run up certain lymphatics and inflame the inguinal glands, why should not other lymphatics starting from the vagina or the womb convey the same or other poisons to similar glands situated within the folds of the broad ligaments? Why, indeed!—and yet this is not the received notion, although no one would be prepared to say that lymphatics and glands obey different laws, according to the part of the body in which they be placed.

This etiology of abscess of the broad ligaments is seldom even thought of; Dr. Bernutz scouts it as too simple to be true, as if simplicity were not a sign of pathological truth.

I am glad, however, to note that some general pathologists, Chomel, Trousseau, and Noel Guéneau de Mussy, have admitted lymphangitis as one of the causes of abscesses of the broad ligament.

The inconsistency of having two explanations for the same pathological process is shown by the fact that puerperal ichorrhæmia may poison at the same time the pelvic and inguinal glands, as in Duplay's seventh case, in which the latter were found infiltrated with pus, and in two of Dr. Quinquand's cases, in both of which the inguinal glands were swollen, while in one of the two the popliteal gland was infiltrated with pus. It is unnecessary for me to do more than to remind you that these lymphatic glands may swell to a great size and recover without much structural impairment, that suppuration may damage them severely, and that they frequently melt into pus and so form part of the abscess that the inflamed gland gave rise to in its surrounding connective tissue. The state of a gland acutely inflamed is sometimes like one described by Dr. Quinquand in his twelfth case. "One of the lumbar glands was as large as a small apple and was approached by several voluminous afferent lymphatics full of pus, as were the efferent lymphatics. On opening the gland there were ten little abscesses divided one from another by congested "trabeculæ." The thoracic canal was twice its usual size and full of pus."

It follows from what has been stated that there is a chance of an internal bubo, at the junction of the body and the neck of the womb, in the midst of the utero-ovarian vessels, and within the folds of the broad ligaments, near the sacral and iliac glands. As lymphatic vessels the size of crow-quills have been repeatedly found full of pus, anastomosing under the iliac peritoneum, on their way to the lower lumbar glands, and as these vessels were surrounded by cellular tissue in various stages of inflammation, it is clear that lymphangitis sometimes causes iliac abscess.

3rdly. *Peritonitis.*—You are prepared to accept peritonitis as a frequent result of lymphangitis, on account of the stress I have laid on the close vicinity of the sub-

peritoneal lymphatics to the peritoneum, and on account of the free communication that exists between these lymphatics and the peritoneal cavity. Although Cruveilhier had seen a woman die of acute lymphangitis, on the ninth day after delivery, without there being peritonitis, he already laid it down as a rule that peritonitis always coexisted with pelvic lymphangitis, whereas phlebitis was often free from it. Recording his experience of two disastrous epidemics, Dr. Botrel says, "Peritonitis may be limited to the pelvis, but it invariably coincides with angioleucitis." There was peritonitis in twenty-nine out of the thirty-six women opened by Duplay, after death from puerperal lymphangitis. The subserous lymphatics can scarcely be inflamed without inflaming the peritoneum, and in the early stages of peritonitis thus produced, the pus-distended lymphatics mark their course by lines of transcurrent peritonitis, analogous to the lines of inflamed skin that show the course of subcutaneous lymphangitis. This disposition is so constant, says Dr. Championière, "that when I am in search of inflamed lymphatics of the womb, I look out for these false membranous tracings towards the angles of the uterus, and gently scraping them off with the back of the scalpel, I often bring to view lymphatics more or less distended with pus." Dr. Klein in his experiments on animals has always seen peritonitis follow subserous lymphangitis, and he notes finding the stomata gorged with cells or obstructed with fibrin, as a result of peritonitis. All this fits in with the teaching of Simpson, that cellulitis was always accompanied by some amount of peritonitis, and explains why the easy peeling off of the peritoneum is a sign of peritonitis.

Dr. Bernutz gives two cases in which he admits, that the occurrence of peritonitis after cervical chancre could only be explained, by supposing that the lymphatics had carried inflammation to the peritoneum. He does not think himself justified in adopting this explanation because, out of twenty-four cases of peritonitis following cervical chancre, these were the only two that he could not explain to his own satisfaction. I do not see why cervical chancre should inevitably cause lym-

phangitis, any more than that gonorrhœa should always be followed by bubo, but the two cases in question were singularly well calculated to inflame the lymphatics, for in both the chancre was diphtherical, digging deeply into the cervix, and peritonitis only came on when the false membrane fell away and exposed unprotected lymphatic capillaries to the contact of acrid secretions. Neither should it be forgotten, that whatever mucous membrane is affected by the unknown cause of diphtheria, it becomes thereby more liable to lymphangitis.

Ovaritis and Salpingitis.—The ovary is covered with columnar epithelium, and lies outside the peritoneum, so that ovulation may take place with the least possible chance of peritonitis, but as the ovary is surrounded on one side by the lymphatics that go to form the spermatic lymphatic plexus, and as it is underlined by subserous lymphatics, should they become inflamed during puerperality, they inflame the ovary.

The appearances of ovaritis caused by puerperal lymphangitis have been well described by Dr. Robert Lee:

"The ovarium was enlarged to the size of a hen's egg, its surface of a bright red colour, and imbedded in lymph; its structure disorganized, and the whole presenting the appearance of a soft cyst, distended with a purulent and gelatinous fluid. The left ovarium had lost all traces of its natural form and texture, being reduced to a broken-down flocculent pulp. The absorbents of the uterus, on the left side and on the left broad ligament, were filled with pus."

The researches of His on the lymphatics of the ovary help to explain this total fusion of the ovary when inflamed by puerperal lymphangitis. He affirms that the follicles and their yellow bodies are enclosed in a network of lymphatics, and that numerous vessels converge to the hilum and there leave the ovary. Now we know that pregnancy and puerperality increase the size of all pelvic lymphatics, and this may explain the well-known softening and vascularisation of the ovary during pregnancy, and the melting down of

its tissues should their lymphatics become inflamed during puerperality.

I have little doubt that blenorrhagic ovaritis sometimes occurs in the same way, and is the result of subperitoneal lymphangitis, although I do not contest the possibility of the infected oviduct actually inflaming both the ovary and the peritoneum. Blenorrhagic ovaritis is not a fatal disease, and we have still much to learn respecting it, from post-mortem examinations.

What I said of the ovary applies to the oviduct; it is covered with minute lymphatic reticulations; it lies close to subserous lymphatics, and sometimes participates in their inflammation. This explains those ill-understood cases in which, the womb and the ovaries being perfectly healthy, the outer third of one or of both oviducts are found intensely inflamed; the infundibula much swollen, and in colour vermilion; the fimbria œdematous or infiltrated with pus, pelvi-peritonitis being most acute in the immediate vicinity of the infundibula.

Drs. Behier, Championière, and D'Espine have already admitted that salpingitis is often caused by peritonitis, and Dr. Hervieux, in the absence of ovaritis, has often seen salpingitis coinciding with some one or other of those pelvic diseases that I have shown you to depend sometimes on lymphangitis.

Secondary lesions of lymphangitis.

It was easy to understand that a chain of acutely inflamed lymphatics might inflame the tissues through which they pass and the serous membrane they underlie, but it is more difficult to understand why lymphangitis should inflame other serous membranes, the synovial membranes, the spleen, and even the thyroid gland. One or several of these secondary lesions may be met with in the private practice of midwifery; they are more common in hospitals, as sporadic

cases of uncomplicated puerperal lymphangitis, but may be quite independent of any epidemic influence.

After the peritoneum, the pleura are of all serous membranes those most frequently inflamed in puerperal lymphangitis. In Dr. Quinquand's thirteenth case, one of uncomplicated lymphangitis, "after removing false membranes, there were seen in the subserous cellular tissue, under the right pulmonic pleura, an admirable network of yellowish-white lymphatics. Here and there were ampullar dilatations, and from them there flowed pus, in which leucocytes and granular bodies floated in a fatty emulsion." A similarity of texture between serous and synovial membranes is the only way of accounting for the production of arthritis by lymphangitis, and why it should so much more frequently cause arthritis than does phlebitis.

The spleen is so intimately connected with the lymphatic system that it will not surprise you to learn that, like the ovary, it is frequently converted into a pulp of shreds and purplish mud. There is so much lymphatic tissue in the thyroid gland that future observers should look to the lymphatics in cases of puerperal goitre, which are of very rare occurrence. I do not include visceral or metastatic abcesses among the secondary systems of lymphangitis, because most of those who have studied the disease, believe that uncomplicated lymphangitis does not cause them, and that they are characteristic of phlebitis, which is a very frequent complication of lymphangitis. On the other hand, it should be ascertained, whether the occurrence of visceral abscesses be not a mere matter of time, and whether they may not be expected as the ultimate result of either disease, should the patient's life be sufficiently prolonged.

There is no doubt that the importance of phlebitis as an explanation of a host of pathological facts, and the greater facility of studying its lesions, has hitherto caused similar lesions of the lymphatics to be overlooked or to be set down to the veins. Cruveilhier reproached Duges with having made this mistake in the 198th figure of his 'Atlas.'

Hope seems to have made a similar mistake in his atlas,

and Dr. Champonière accuses Professor Behier of having fallen into like error.

In the first number of the 'Annales de Gynæcologie' there is a case that occurred in the practice of Dr. Gallard, and which is called phlebitis, although it contains evidence of being an example of puerperal lymphangitis.

A woman died of puerperal fever on the twenty-first day after delivery, and she presented the following lesions :—The little pus that could be squeezed out after making a section of the utero-ovarian vessels was yellow, thick, and cheesy-looking. Under the uterine mucous membrane were several of those minute abscesses that afford good evidence of lymphangitis, and they contained yellow, creamy pus. Voluminous, subpleural, yellow lymphatics had caused pleurisy, and there was a yellowish infiltration of the arachnoid, the nature of which was not inquired into. There was an abscess in the extensor sheaths of the right hand and signs of inflammation in the corresponding synovial membranes of the left. There were several small abscesses in the right lung, the pleuritic lesions of which I have mentioned.

There are so many obscure points in the history of lymphangitis and phlebitis, that it would be well if some one would follow up the experiments lately made by Dr. D'Espine and Dr. Quinquand, who ejected septic fluids into the wombs of recently delivered rabbits and cats.

You may say "that under the influence of better hospital arrangements the virulence of epidemics is diminishing, and that there is little practical value in what I have related about the diseases caused by lymphangitis." You would be wrong, for sporadic puerperal lymphangitis is a disease of frequent occurrence. The first case published in this country by Dr. R. Lee occurred at St. George's. The woman was about to be confined when Mr. Cæsar Hawkins removed a sloughing bursa from one of her knees ; fever set in, she died in a fortnight, and the lymphatics of the broad ligaments were gorged with pus. The various cases of fatal lymphangitis published during

the last four years by Drs. Champonière, D'Espine, Quinquand, and Fontanes were sporadic cases, and if they could be found to occur in half a dozen different Paris hospitals, similar cases must occur in our London hospitals, although we hear nothing of them.

Interest, or a strange perversity, leads some women to conceal from us the fact that they are pregnant, so we may be induced to operate on the cervix during the early months of pregnancy, and frequently death has speedily followed the operation. The cause of death has not been carefully inquired into in most of these cases, but the probable cause was lymphangitis, as in the case of a woman who, being under the care of Dr. Broca at the Hôtel-Dieu, concealed the fact of her being three months pregnant, so this eminent pathologist applied the actual cautery to a very extensive ulceration of the cervix. This operation was well borne, but a second application made a few days afterwards caused severe abdominal pain, miscarriage, and peritonitis, which was fatal in a few days. Peritonitis was general, but more intense round the ovaries and the oviducts; lymphatics full of pus were to be seen on both sides of the womb, and they could be traced up to the ulcer on the cervix. The wound made by the actual cautery was superficial, the placental spot of adherence healthy, the uterine veins uninflamed, and there was no zymotic disease in the ward. You see death was the result of an untimely application of a strong caustic to the uterus, when its lymphatics were in a high state of puerperal activity; there was no question of ichorrhæmia in this case, neither was there any in one that occurred in the practice of Buhl, of Munich, who, after removing a tumour from the vagina of a young mother, aged 16, cauterised the wound with the actual cautery. She died rapidly, and there were found lymphangitis, peritonitis, pleurisy, with fetid pus, and the liver and kidneys were highly congested.

All surgeons know that, independently of puerperality, any wound that bathes in ichor may lead to lymphangitis. Cases of this kind have been quoted by Dr. D'Espine

from Dr. Buhl's practice. Two young women died ten days after operations on the pudenda, and he found gangrene of the vagina; the pelvic lymphatics were greatly distended with pus; there was also general peritonitis and double purulent pleurisy. In another case the same operator removed a cancroid excrescence from the cervix of a girl of 16, who died seven days afterwards; the womb looked healthy, but there was a gangrenous smell about the wound of the cervix; there was a bundle of pus-distended lymphatics on each side of the womb, purulent peritonitis, and double pleurisy. We know that the lymphatics spread blennorrhagia and syphilis, but they generally do so without being inflamed. I have incidentally already spoken of the causes of lymphangitis, but it is well to lay further stress on so important a subject.

Causes of lymphangitis.—A peripheral wound, an envenomed wound made worse, both by constitutional conditions and by hospitalism—such is the mode in which causes combine to produce more and more fatal lymphangitis, so it is right to consider them in that order.

1st. *A peripheral wound.*—If surgeons are right in admitting that any wound may cause lymphangitis, surely it must occur in the surgery of the pelvic organs, in which I have shown lymphatics to be unusually abundant; yet we seldom hear lymphangitis mentioned in connection with pelvic surgery. It would be now possible to make out a long list of cases in which death from peritonitis has occurred within a few days after some traumatic lesion of the cervix; cases in which there was found no sufficient cause of death except where the lymphangitis was carefully looked for, as by Professor Broca, and Buhl, and others.

Simpson, Aran, Hugier, Broca, and others have seen death caused by the judicious use of the uterine sound; the actual cautery, applied with all due care to the cervix, was soon followed by death in the practice of Aran, Becquerel, Dumarquay, Jobert de Lamballe, and Broca. I would not affirm that in these cases death was caused by lymphangitis, but I look upon it as the most likely explanation until in

similar cases lymphangitis has been sought for and found wanting.

Bernutz was exceedingly interested to discover the causes of pelvi-peritonitis, but he rejects the explanation I propose, and he prefers to explain peritonitis by the transmission of inflammation from the womb to the peritoneum through the medium of the inflamed oviduct. In many of the published cases of pelvi-peritonitis, in Dr. Champonière's first and fourth cases, in some of Dr. Bernutz's and of Dr. Hervieux's, a healthy portion of the oviduct separated a congested womb from acute infundibular inflammation, while in most of Dr. Bernutz's cases the ostiæ uterinæ of the oviducts were occluded, so that inflammation would have to pass through a solid cord about the size of a No. 8 bougie.

In proof that peritonitis has been caused by metritis, Dr. Bernutz argues that the uterine secretion accompanying pelvi-peritonitis increases or diminishes as peritonitis is more or less intense. But surely the womb may be excited by peritonitis without having caused it, and some of his own cases show that fatal peritonitis had been unaccompanied by any uterine secretion worth considering, either for quantity or quality. I do not contest the possible transmission of inflammation from the womb to the peritoneum when the whole length of the Fallopian tube is evidently inflamed, and when the same kind of secretion is met with in the womb and in the oviducts, but I feel bound to look out for another cause of peritonitis when there be little or no signs of uterine inflammation, when the impermeability of the ostiæ uterinæ forbid its transmission, or when, being permeable, the uterine end of the Fallopian mucous membrane is found healthy, while inflammation attains its height at the infundibulum, then fades away to vanish midway down the tube. This teaching is in harmony with that of Sir James Simpson, who mentions that a weakly woman died a few days after he had passed the sound to measure the uterus, and in whom he found no lesion to explain death, and he repudiates the notion of a

frequent passage of inflammation from the womb to the peritoneum, through the tubes, unless in gonorrhœal cases. To this Dr. Lauchlen Aitken adds, "my own observation has never convinced me that genuine metritis was in any case the traumatic precursor of an attack of pelvi-peritonitis or cellulitis," and he professes his inability to account for the occurrence.

Knowing how easy it is to pass over a small amount of any mischief to which one's attention has not been directed, I think lymphangitis was the *probable* cause of death in the following interesting cases that I briefly relate.

Aran's eleventh case refers to a woman who had long suffered from uterine ulceration and from chronic pelvi-peritonitis, when in an unlucky hour he tried for a few minutes to fix a pessary into the vagina. Acute peritonitis soon set in, and carried her off in a fortnight, and on examination Aran found acute peritonitis, particularly all round the left ovary and oviduct, and there was pus between the left ovarian ligament and the round ligament. Attached to the corresponding ovary, by old adhesions, the left oviduct had become a cyst, by the obliteration of its distal end, and contained transparent mucus. There was no trace of inflammation in the uterine mucous membrane, and the uterine tissues were scarcely congested.

Aran gives another case at p. 647. A woman who had formerly suffered from pelvi-peritonitis had so much uterine pain and congestion that he scarified the os uteri. She died of peritonitis, fourteen days after this little operation, and the only acute lesions found on opening the body were peritonitis and salpingitis, for there was pus in both oviducts, and the fimbria as well as the infundibulum were much swollen and of a vivid red colour.

In another case, at p. 667, the same observer relates, how he was induced by the example of Professor Lafaye, of Christiania, to apply Potassa Fusa cum Calce to the cervical canal, with the view of curing retroflexion of the womb by cicatricial tissue. Periuterine inflamation soon set

in and led to death, and on examination it was found that both ovaries and oviducts were acutely inflamed, but the body of the womb was perfectly healthy.

The thirteenth case of Dr. Sireday's excellent 'Thesis' is that of a woman in whom the os uteri was extensively ulcerated, and whose uterus was kept retroflexed by tough adhesions of old standing that united the uterus to the rectum. A moderate attempt to rectify this false position by means of the uterine sound was soon followed by fatal peritonitis. The womb contained blood, was congested, and its mucous membrane was thickest around the ostia uterina, but the mucous membrane of one of the oviducts was not the least injected, neither was the mucous membrane of the other oviduct injected, in the portion of it nearest to the womb.

It would be well to look after the pelvic lymphatics when such cases occur, as they must occur amongst us, now that the uterine sound is handled with a frequency and a boldness that frightens such men as Drs. Oldham, Bennet, and Bernutz, while the transfixing of the womb is represented to be a matter of little importance; at a time when the division of the cervix is held to be the panaceum of most uterine diseases, and when more moderate men advise the dilatation of the cervix by a pressure of four pounds to the square inch; when the washing out of the cavity of the womb with fuming nitric acid is given as a mild measure, and when every rising man backs an intra-uterine pessary of his own, at a time, in fact, when impatient of the delays that must inevitably attend the treatment of uterine affections, the tendency is to rush into some one or other form of meddlesome surgery which is sure to prolong the date of recovery, even when it does not complicate the patient's case by some additional complaint.

2nd. *An envenomed wound.*—Animal poisons that infect the system often pass through the lymphatics without inflaming them. It is so generally with the blenorrhagic, the syphilitic, and the cancerous poison, but although it be frequently so with that poison contained in the decomposing

animal secretions, which we call ichor, it often both poisons the system and inflames the vessels. Large wounds formed by the section of big muscles bathe with comparative impunity in ichor, while peripheral wounds seldom bathe in it without absorbing the poison to some extent. Peripheral wounds whether on the skin or on a mucous membrane let the poison into the lymphatic capillaries and into the canalicular system, and I have shown you how lymphangitis can be generally traced to some wound, and that ichorrhæmia leads to the primary and secondary lesions of lymphangitis more frequently than to metastatic abscesses.

3rdly. *An infected wound during puerperality.*—In a pelvic wound during puerperality, the increased size of the lymphatics and their greater power of absorption renders it more dangerous for a peripheral wound to bathe in ichor. Lymphangitis may be more extensive and the primary and secondary symptoms more serious, while the state of the blood during puerperality tends to give fever its peculiar character. The danger of peripheral lesions during puerperality has been already amply shown, but Dr. D'Espine found that when he injected the same quantity of filtered lochial fluid into the womb of recently delivered rabbits the symptoms of poisoning were more marked, and death came sooner, when, with a lancet, he made a few notches in the vagina; hence the fair deduction that the more the utero-vaginal mucous tract be lacerated in midwifery practice, the greater the danger of ichorrhæmia.

4thly. *Epidemic lymphangitis.*—Although blood-poisoning can be as distinctly traced to lymphangitis as to phlebitis, neither are necessary for puerperal fever, and the poisonous influence may enter through the lymphatics without inflaming them, when puerperal women are placed under a combination of bad hygienic conditions described as hospitalism.

The poison may enter through the skin and the lungs, and when intensely powerful, it may itself, at once, cause peritonitis, not to be accounted for by the diseased state of the surrounding organs.

The following cases clearly show how the puerperal poison may affect the lymphatics, although not in a way to fill them with pus.

Dr. Championière cites the case of a woman who died of peritonitis. In the womb was a bit of putrid placenta, there was no pus in the lymphatics, but there were several very large and red lymphatic glands alongside of the womb showing the passage of poison through the lymphatics. Dr. D'Espine's eighteenth case tells of death caused by acute ichorrhæmia without lymphangitis, but the lymphatics contained the same kind of brown fetid fluid as did the womb, in which were fragments of putrid placenta.

The same pathological conditions are said to have been observed by Disse, in 1852, during an epidemic of puerperal fever which he witnessed in Brukel, a small town in Westphalia.

Lastly, Dr. D'Espine produced typhoid symptoms in lately delivered rabbits, by injecting filtered lochial discharge into their cellular tissue ; no lymphangitis was found, but a considerable amount of visceral hyperæmia. In a similar experiment made by Dr. Quinquand, very fetid filtered lochial fluid was injected into the cellular tissue of a guinea-pig, and after death there were found in the liver several small cysts containing a fetid fluid, but no pus, neither was any pus in the veins or lymphatics, only a few swollen lymphatic glands.

Doubtless the main thing for us is to be certain that ichor is a deadly poison to puerperal wounds, but it is deeply interesting to know how the poison works and is diffused. The poison may be fluid or granules, suspended in it, and be conveyed by the serum of the lymphatics. If colourless contractile corpuscles can be made to absorb vermilion and to carry it far from the spot where they were stained, they may do the same for the poison of ichor, or the lymphoid bodies may take the poison and pass it on to others. Should the poison have caused a considerable amount of lymphangitis, then a considerable amount of pus will be poured into the circulating system, either through

the anastomoses that are admitted to exist between the lymphatic and the venous system by Recklinghausen, or else by large lymphatics into the azygos vein, as seen by Cruveilhier and Botrel, or into the vena cava, as seen by the last-named observer, or into the thoracic duct, as seen by Duges and Quinquand. If Dr. Klein's researches are confirmed by other observers, there will be an additional way of understanding the crowding of the blood with white corpuscles in puerperal fever, for as puerperal ichor, like all septic agents, soon irritates the peritoneum, the peritoneal patches would proliferate more freely, and the young cells would be absorbed by the stomata of such parts of the serous membrane as are not acutely inflamed. However introduced into the system, when a large quantity of white blood-corpuscles circulate in the blood, they infect and inflame more particularly those parts of the body that are more intimately related to the lymphatic system, the serous and synovial membranes, and the spleen.

Another theory asks us to believe that puerperal septicæmia depends on floating bacteria gaining entrance into the lymphatics and blood-vessels of puerperal women, and there multiplying to a vast amount. It is unnecessary for me to say that this theory comes of the somewhat exaggerated importance ascribed by German histologists to the presence of bacteria in the blood. The latest exponent of these views is Dr. Heiberg, of Christiania; and on examining the bodies of women who died of septicæmia, soon after death, he found abundance of bacteria in the lymphatics, the veins, and in the tissues of the body. As bacteria are known to exist in the healthy body, I think their inordinate development is more likely to be the occasional result of ichorrhæmia than its cause, and I look on them as the result of post-mortem changes in the fluids of the human body. I say occasional result, for there is no mention of bacteria in the recent microscopical examinations of puerperal ichorrhæmic fluids, by Paris pathologists.

There is no way of understanding why the same observer in the same conditions of observation should at one

time have to describe phlebitis and at another lymphangitis, and why, from the same kind of uterine putrescence, the poison should be taken up, one year by the lymphatics and another year by the veins. We can only chronicle the fact, that during the two years and a half in which Cruveilhier found abundant means of studying lymphangitis, at the great Paris Maternity, he only met with six or seven cases of puerperal phlebitis. In 1830, when Tonellé was in office, lymphangitis was still frequent, but phlebitis was on the increase; and judging from Dr. Hervieux's description of what he calls *Exometrite Angioleucitique*, there can have been little puerperal lymphangitis at the Paris Maternity, during late years, for he describes it, as I do, from the works of others, instead of appealing to his own experience.

Symptoms of Lymphangitis.—You know the typhoid symptoms of puerperal phlebitis, so I need not describe those of puerperal lymphangitis; but bear in mind that, even in sporadic cases of uncomplicated puerperal lymphangitis, the patient may die seventeen hours after delivery, as in Dr. D'Espine's sixteenth case. Both veins and lymphatics are abundant alongside of the womb and between it and the ovaries, so the pain that is caused by pressure on each side of the womb, and the cord-like swelling that may be felt to extend from one angle of the womb to the ovary, may depend just as much on phlebitis as on lymphangitis. In like manner it is often difficult to distinguish whether the semi-solid substance that the finger feels distending a vaginal cul-de-sac is the result of cellulitis, or of false membranous peritonitis, although I think the hardness softens soonest when it depends on cellulitis. Now that Dr. Championière has pointed out the very frequent occurrence of one or more lymphatic glands alongside the womb, where the body joins the cervix, it would confirm the diagnosis of lymphangitis to find there a round painful body.

In relating his fourteenth case, Dr. Bernutz mentions that a girl of 16, had blenorrhagia, uterine catarrh, salpingitis, and peritonitis; but he notes that on the eighteenth day

after her admittance he detected "on the left side of the womb, at the union of the body and its neck, a little tumour about the size of a large almond. This little tumour was separated from the womb by a tolerably deep cleft, and it was painful to pressure." I do not see how it is possible not to consider this little painful tumour to be an inflamed lymphatic gland, indicating the line of march of inflammation up to the peritoneum. Another excellent observer, Dr. Gosselin, owns to have been somewhat puzzled, in cases of pelvic peritonitis, by finding solid bodies, about the size of a marble, alongside of the uterus, but well detached from it; and instead of considering them to be lymphatic glands, explaining the origin of peritonitis, he asks whether they could be neuromes,—a question that will not be again asked.

Just as a dissecting wound leads to a variable amount of mischief, lymphangitis may only cause periuterine cellulitis, or cellulitis enough to distend the broad ligament, or an abscess thereof. Lymphangitis may cause every variable amount of peritonitis, and the slight cases that menaced serious consequences may soon recover. This may perhaps explain the slight cases of peritonitis that are often observed during a puerperal epidemic, which Ramsbotham and Rigby have called "false peritonitis," and Gooch and Fergusson "transient peritonitis." The same explanation is perhaps the correct one for abdominal pains, menacing peritonitis, that have been noticed as occurring in the early stage of blenorrhagia by Professor Fournier, of Paris, and by Danish pathologists.

Treatment of Lymphangitis.—I shall only touch on two or three measures that appear to me to be logical sequences of this inquiry. As the chance of infection increases in proportion to the damage done to the utero-vaginal mucous membrane tract, it is advisable to adopt the modern plan of speedy delivery by the forceps, instead of trusting "nature" with the solution of tedious labours. The danger attending the bathing of a puerperal wound in ichor, shows that we ought to adopt the practice of carefully inquiring of

monthly nurses whether the lochial discharge is offensive, in which case she should be ordered to make one or two injections a day with a solution of carbolic acid or Condy's fluid. Dr. Heiberg has had the same idea, and it deserves to be well carried out, although we may not hope to prevent puerperal ichorrhæmia by the destruction of floating bacteria. Much more should be done if the discharge be intensely offensive, the womb flabby and larger than it ought to be; it would be well then to pass a tube through the cervix, and to wash out the womb with a disinfectant fluid. The fear that I have frequently heard expressed, that the fluid injected into the womb might cause peritonitis by passing through the Fallopian tubes, is a groundless fear. It never once did so, out of 300 cases in which Dr. Fontanes injected some kind of disinfectant into the womb soon after parturition. Dr. D'Espine has injected a strong solution of alcohol, into the womb soon after parturition, in thirty cases without causing peritonitis or any other untoward consequence. Dr. Dupierris, since 1840, has been in the habit of injecting a solution of iodine into the womb, immediately after the expulsion of the placenta, to prevent puerperal fever and post-partum flooding; and his success was so great that he made converts of many of those practising, like himself, in Cuba. I refer those who might still remain unconvinced by facts so numerous to Dr. Fontane's work, wherein he has shown by experiments that however great was the pressure applied to water retained in a womb, that had been extracted from the human body, no water passed from the womb to the peritoneum through the oviducts.

So much for the safety of infections after delivery; and with regard to the best disinfectant, iodine commends itself by the well-known innocuity of its contact with the tissues of the body as well as by its high disinfecting power. Dr. Dupierris invariably used, as an intra-uterine injection, one ounce and a half of fluid, made of half an ounce of tincture of iodine, four grains of iodide of potassium, and one ounce of distilled water; this may be safely used for the purpose I recommend, and it would be worth while trying whether

this is not a better means of controlling post-partum floodings than the perchloride of iron.

Nothing can exceed the virulence that epidemic puerperal lymphangitis sometimes assumes. In 1840 the French were little fond of active treatment, and it could only have been in despair of the little use of milder measures that Dr. Botrel could have brought himself to have recourse to repeated venesection, to applications of a hundred leeches to the abdomen, or to forty-grain doses of sulphate of quinine.

Conclusions.

Gathering up the tangled threads of this long inquiry, my teaching may be condensed in the following propositions:

1. That pelvic cellulitis, benign or septic, originates in the lymph spaces and in the capillary lymphatics that have been wounded in some lesion, of the utero-vaginal mucous membrane.

2. That from the patch of capillary lymphangitis implicated in a mucous membrane lesion, inflammation may spread to one or more of the nearest lymphatics, and may be benign or septic.

3. That one lymphatic may pass on inflammation to another, so that a continuous chain of purulent lymphatics may extend from the septogenetic lesion to the lumbar lymphatic glands, and that these acutely inflamed lymphatics often inflame their surrounding cellular tissue, their glands, and proximate organs.

4. That wherever situated in the pelvis, cellulitis follows the same course, but varies in name and in symptomatology according to its topographical disposition and to the organs and the tissues that circumscribe it.

5. That when lymphatic glands do not succeed in barring the progress of inflammation, they also inflame their sur-

rounding cellular tissue, and may thus cause an internal bubo wherever there be a pelvic lymphatic gland.

6. That occasionally periuterine inflammation has no other origin than this frequent origin of abscess of the broad ligaments.

7. That purulent lymphatics on their way to the lumbar glands may inflame the subserous cellular tissue in the iliac region, and thus cause iliac abscess.

8. That the subserous lymphatics and the peritoneum are so intimately united by physical contact and physiological action, that it is almost impossible for subserous lymphangitis not to cause peritonitis.

9. That the subperitoneal lymphatics being continuous with, and contiguous to, those of the ovary and of the oviduct, they may be inflamed by subserous lymphangitis, particularly when it is septic.

10. That the contamination of the blood, by lymphatic pus, leads to the inflammation of those parts that are in physiological connection with the lymphatic system, such as the serous and synovial membranes and the spleen, whilst phlebitis more frequently causes metastatic abscesses, if it be not their sole cause.

11. That though often overlooked in post-mortem investigations, sporadic puerperal lymphangitis is not uncommon, but is more frequently found in connection with but eclipsed by phlebitis.

12. That the worst cases of puerperal lymphangitis have their modified counterpart and their subdued presentment in non-puerperal pelvic pathology, and that more frequently than is admitted, lymphangitis is the cause of speedy death, from uterine operations.

13. That whether women be poisoned by puerperal phlebitis or puerperal lymphangitis, the general symptoms are the same in nature and in intensity, and that the local symptoms vary according to the amount and to the variety of its primary and of its secondary lesions.

14. That the increase in size and in number of pelvic lymphatics during pregnancy, and their increased functional

activity, strongly support the rule not to operate on pregnant women.

15. That as the liability to puerperal lymphangitis is in direct proportion to the number and to the gravity of lesions inflicted on the utero-vaginal mucous membrane, by tedious labours, it is advisable to shorten labour by the use of the forceps, according to modern practice.

16. That the bathing of a puerperal wound in an ichorous discharge is so dangerous, that disinfecting vaginal injections should be made so soon as the lochial discharge becomes in the least offensive.

17. That the innocuity of injecting a solution of tincture of iodine into the womb immediately after delivery, and of a solution of perchloride of iron very soon afterwards, warrants the injunction to inject into the womb some strong disinfecting substance, whenever the lochial discharge be fetid.

18. That the frightful mortality that has attended some epidemics of puerperal lymphangitis, justifies the horror of large maternities generally entertained by the profession.

Works quoted by the author.

Allard, Inflammation des Vaisseaux Absorbents Lymphatiques. Archives Gén. de Médecine, t. vi, 1824.

Andral, Recherches pour servir à l'histoire des Maladies du Système Nerveux. Archives Gén. de Méd., t. vi, 1824.

Velpeau, Maladies du Système Lymphatique. 'Arch. Gén. de Méd.,' 2de série, t. viii and x, 1835.

Breschet, Le Système Lymphatique. 'Thèse de Concours,' 1836.

Bouillaud, 'Clinique Médicale,' t. i, 1837.

Ollivier, Maladies des Lymphatiques, Dictionnaire en 30 volumes, 2de édit., 1838.

Robert Lee, Case of Puerperal Lymphangitis. Med.-

Chir. Transactions, vols. xv and xvi, 1829. His work on 'Diseases of Women,' 1830.

Boivin et Duges, Maladies de l'Uterus et de ses annexes, 1833.

Tonellé, Des Fièvres Puerperales observées à la Maternité de Paris. 'Archives Générales de Médecine,' tom. xxii, 1830.

Duplay, De la Suppuration des vaisseaux lymphatiques de l'Uterus, à la suite de l'Accouchément. 'Archives Générales de Médecine,' tom. vii, 1835.

Cruveilhier, Anatomie Pathologique, 13eme livraison, 1835—42.

Botrel, Mémoire sur l'Angioleucite Uterine. 'Archives Générales de Médecine,' 4eme série, tom. vii, 1845.

Tilbury Fox, Two papers on Phlegmasia Dolens. 'Transactions of the Obstetrical Society of London,' vol. ii, 1861.

Recklinghausen, On Lymphatics in Stricker's 'Handbook of Human and of Comparative Anatomy.' 'The New Sydenham Society's Transactions,' 1870.

Cornil et Ranvier, Manuel d'Histologie Pathologique, 2de partie, 1873.

Klein, On the Lymphatics, 1873.

Fontanes, Études sur les injections Uterines àprés l'Accouchément, 1869.

Dupierris, De l'éfficacité des injections Iodées dans la cavité de l'Uterus, pour arrêter les Métrorrhagics qui suivent la délivrance, et de leur action comme moyeu préventif de la Fievre puerperale, 1870.

Just Lucas Championière, Lymphatiques Uterius et Lymphangite Uterine. Paris, 1870.

Quinquand, Essai sur le Puerpérisme infectieux chez la Femme et le nouveau-né. Paris, 1872.

D'Espine, Contribution à l'étude de la Septicémie puerpérale. Paris, 1873.

Lordereau, De la suppuration dans l'Erysipèle. Paris, 1873; and Angioleucite. 'Journal de Robin,' 1873.

Renaut, Sur l'Édème Lymphatique. 'Archives de Physiologie,' 1872.

Union Médicale, 1872. Discussion sur l'Erysipèle dans la Société de Chirurgie.

Leopold, On Uterine Lymphatics. 'Archiv f. Gynæk.,' b. vi, heft 1, 1873.

Heiberg, Die Puerperalen und Pyämischen Processe, von Hjalmar Heiberg. 8vo, Leipzig, 1873.

Dr. Palfrey did not altogether agree with the author as regards the frequency of this disorder. It was, without doubt, more common in maternity hospitals than generally believed, and yet, though he was attached to one, he had never seen a case, and in the London Hospital they had never lost one. No proper comparison could be made between the London and Paris hospitals, the ventilation and hygienic arrangements in the latter contrasting unfavorably with the former. He would ask whether the author advised injecting iodine into the uterus three or four hours after labour, and whether there was no fear of the fluid passing through the Fallopian tubes into the peritoneum. He had seen one case where it was fatal. In another Dr. Head injected the perchloride of iron into the non-pregnant uterus. Death occurred shortly after, and the iron was detected post-mortem in the peritoneal cavity. He (Dr. Palfrey) thought it was not prudent at any time to inject fluids like tincture of iodine and perchloride of iron into the uterus; the results were often most disastrous. He would ask whether the author considered pelvic cellulitis and lymphangitis to be one and the same condition. He had never seen glandular enlargement in the pelvis in pelvic cellulitis, and it was not as a rule a fatal disorder. Remembering that what the author taught would go forth to the world, he desired to express his dissent from the views enunciated respecting the harmlessness of intra-uterine injections. If it was so difficult for fluid to travel along the Fallopian tubes, how is it that semen often traverses them, and we get extra-uterine pregnancy as the consequence? He considered it was very easy for fluid to pass. *Apropos* of a remark of the author that every one had backed some form of intra-uterine stem, he begged to say that he himself had never done so. He had incised the cervix in some 300 cases, and there was no operation so successful. It was one of the grandest operations we had for the relief of suffering and the cure of sterility.

Mr. Ross Jordan (Birmingham) said:—Mr. President, I shall not make any remarks on your learned and excellent paper, but would like to say, in reference to your suggestions as to injecting

the uterus shortly after delivery, that I think Dr. Palfrey's argument is very inapplicable, as the case he gives, in which a friend injected a non-pregnant uterus, must not be compared to a like operation on the recently delivered organ. We know that the Fallopian tubes will allow the passage of fluids in a non-pregnant person, but, as far as I know, we have no proof that such is the case shortly after delivery. If any gentleman has post-mortem experience on the subject it will be extremely valuable. I think the argument that "the seminal fluid passes along the tubes, or we could not have extra-uterine pregnancy," is still more unfortunate. We do not know that the said fluid as fluid passes along the Fallopian tubes at all; we know the spermatozoa pass, but they are endowed with special powers of locomotion, besides which the cilia lining the tube no doubt aid in their transmission.

Dr. Savage could not side with Dr. Palfrey in the position he assumed in regard to Dr. Tilt's paper. Modern pathology was founded on German discovery, and Dr. Tilt's paper was an excellent exposition of it, as far as concerned the lymphatic uterine system. The meaning of lymphangitis depended on tne acceptation of the term inflammation. The tissue changes on inflammation involved all the primary components of the tissues affected. The seat of inflammation was the connective tissue or reticulum of lymphatic radicles. Inflammation without lymphangitis was inconceivable. Dr. Palfrey wanted a distinction between pelvic lymphangitis and pelvic cellulitis demonstrated; he was evidently thinking of results, not of the thing itself. Pus in the larger pelvic lymphatics, cellular abscess, and so forth are indications of a foregone morbid process originating in the tissue referred to. As to insisting on personal experience as the sole foundation of a good paper, a paper of that sort would not be worth much. Virchow's theories had been the starting-point for theories innumerable, and a very reliable modern pathology is the result. Dr. Palfrey apparently was no believer in pessaries, yet almost every other practitioner had his own particular machine and contested strongly in favour of it. The issue of the pessary conflict probably none of us would live to see. Dr. Tilt's practical inferences were very valuable. He (Dr. Savage) knew of three deaths from very moderate surgical dilatation of the uterine cervix, and two after injection of weak caustics into the uterine cavity without the preliminary of dilatation of the cervix, but this duly effected, he believed the injection, for instance, of the strongest iodine solutions harmless. He commenced that practice in 1857, it had been practised since by others in hosts of cases, as far as he knew, without bad consequences in a single instance.

Dr. Tilt had not represented the belief in the frequency of lymphangitis to be generally admitted in France and Germany,

but he maintained that if half a dozen earnest workers could find a considerable number of cases of puerperal lymphangitis in several of the Paris hospitals, during the last four years, similar cases must certainly occur in London hospitals, and he also asked hospital men to look to the lymphatics in cases of speedy death after operations on the pelvic organs. Dr. Tilt had not denied the possibility of some fluid passing from the oviducts to the peritoneum, and he was glad to have elicited trustworthy evidence of two cases in which some of the perchloride of iron injected into the womb had been found in that part of the peritoneum that surrounds the fimbria; but he maintained that this was of exceedingly rare occurrence, and that if otherwise, such cases would not be quite exceptional, and they would have frequently occurred in Paris, where during late years it has been the practice in some hospitals to wash out the womb with a strong solution of alcohol or carbolic acid whenever the lochia became fetid. He therefore believed that rather than let fetid secretions remain pent up in the womb after delivery, it was better for a patient to run the infinitesimal chance of the disinfectant passing into the peritoneum. Dr. Tilt knew the value of surgery in uterine therapeutics, and he also knew that the present tendency was to place too great a trust in surgical measures for the treatment of diseases of women.

JULY 1st, 1874.

Edward John Tilt, M.D., President, in the Chair.

Present—40 Fellows and 9 visitors.

Books were presented by Dr. Abegg, Dr. Battey, and Mr. Sercombe, and several works of Pouchet, Velpeau, North, and Mathieu, by Dr. Tilt.

Dr. A. L. Galabin, Dr. N. S. Kerr, Mr. Arthur Roper, Mr. A. B. Hopkins, and Dr. G. A. Simpson, were admitted Fellows of the Society.

The following gentlemen were elected Fellows:—James Henry Clark, L.R.C.P. Ed. (Jamaica); George Hoggan, M.B. and C.M.; Thomas Pigg, M.D. (Manchester); and William Thomson, M.D. (Peterborough).

The following gentlemen were proposed for election:—Dr. Wm. Clair, Mr. W. A. Fitzrayne, Dr. E. L. Kock, Dr. James Louttit, Mr. W. H. Roots, and Mr. A. R. Ticehurst.

ON THE TREATMENT OF ANTEFLEXION OF THE UTERUS WITHOUT INTRA-UTERINE STEM.

Dr. Galton.—I do not present this instrument to your notice as either novel or original, but as having been used with marked success in a case in which very aggravated symptoms were associated with anteflexion of the uterus, and as affording proof, by the relief resulting from its use, that the malposition of the womb may be successfully treated without the use of the intra-uterine stem. The principle of construction is very simple, consisting of a curved metal stem which passes under the pubic arch, and bears exteriorly

a spring with convexity forwards, and backward spring pressure to rest upon the pubic bone ; and interiorly a metal stem, supporting a boxwood crutch which passes up into the anterior *cul-de-sac* in front of the cervix uteri.

At the point of junction of the single internal stem with the double-stem termination of the outer open spring, is a swivel joint connecting the two parts and allowing of a free movement of rotation of the inner part.

The case for which this instrument was made, was of a single lady æt. 34, who was under observation in April, 1871. The severe symptoms commenced in the year 1867, and consisted at first merely of pain and fainting during a menstrual period in November. In December, on the recurrence of the attack, she was found to be suffering from anteflexion of the uterus. The symptoms gradually increased in severity until severe uterine pain pervaded the whole menopause, the period being only distinguished by increased severity of pain. Hypodermic injections of morphia alone afforded relief. For the twelve months preceding April, 1871, these were used twice every day, and three times a day during the period. The patient was entirely confined to her couch, and every means adopted failing to give relief, seemed destined to cast opprobrium upon our art. There was no other lesion to be discovered save the anteflexion, which was very marked, and the fundus uteri was apparently free from adhesion, as it could be easily raised by means of the finger.

In April, 1871, this instrument was made for me by M. Foveux, of Messrs. Weiss and Son, and gave considerable relief at once. The measurement was taken by the index finger in the vagina and the thumb round the pubis, the outline being transferred to paper. Within a month of its application the hypodermic injections were entirely discontinued, and there has never since been occasion to resume them. Till the month of April, 1874, I lost sight of my patient. She then applied to me, and I found that she had been wearing the same instrument without its having been removed at all for three years. With

the exception of a slight weakening of the joint between the two portions, the instrument was in perfectly good condition on removal, and not encrusted with deposit. After the first signs of successful issue in this case, I had a similar instrument made for another patient with anteflexion, but I omitted the swivel joint between the two portions, as I thought it likely to interfere with the urethra and surrounding parts, but, on the present specimen becoming disconnected at the joint, I used temporarily the jointless one, while another, similar to the one handed round, was being made. My patient complained much of the inconvenience which the absence of the movement of rotation occasioned her. I need not say that the instrument is only adapted to cases of this malposition occurring in single females, and I have been able to follow up its use in only two other cases; one in which a fibroid at the fundus complicated the anteflexion, and its use here was attended with only temporary relief, and the other patient could not be induced to continue the use of the instrument. I have brought the successful issue of a single case before this Society in the hope of inducing those who meet with a larger selection of these cases than general practice affords to try some similar treatment. In the 'Obstetrical Transactions,' vol. xi, p. p. 217, meeting November 3rd, 1869, Dr. Aveling says:—"I believe the most successful pessaries are those which press upwards the anterior vaginal pouch, which has the effect of producing retroversion. For this purpose I use a pessary, which is simply a piece of stiff wire with a loop at one end to receive the ends of a band round the waist, and a knob at the other which rests in front of the cervix." In connection with this observation I may mention that I did not observe the effect of retroversion after the prolonged use of this instrument in this case. In spite of the remarks of Dr. Aveling, of still stronger condemnatory remarks by Dr. Marion Sims, who speaks of the entire discontinuance of the use of intra-uterine stems in America, recent papers brought before this Society and general opinion appear to point to a belief that the intra-uterine stem is the only mode of meeting success-

fully this form of malposition of the uterus. It is to combat this opinion that I have ventured to bring before this Society the result of the instrument which I have exhibited.

Dr. Routh could not understand how the instrument kept in position.

Dr. Aveling thought there would be a difficulty in getting the spring to act properly in fat women.

Dr. T. C. Hayes exhibited the macerated os innominatum of the case of malignant disease shown at a previous meeting.

Dr. T. C. Hayes also exhibited the uterus and appendages of a patient who had died under Dr. Geo. Johnson's care, from heart disease, which was probably congenital. Her age was twenty-eight years, and she was an unmarried virgin. She had complained of no uterine symptoms, except an absence of menstruation for the past four months. After death, in the vagina the finger felt behind, and to the right of the uterine neck, a tense, smooth, rounded body, about the size of a walnut, and still nearer the cervix, between this and the cyst, the lower portion of a somewhat firm flattened body was detected. Both bodies were freely moveable, and readily slipped away from the finger. Nothing abnormal was detected on the left side of the cervix. When the abdomen was opened the broad ligament was seen to be large and lax, and the uterus occupied its normal position. Both ovaries were freely suspended, their faces looking directly forwards and backwards, in Douglas' space, and the right one, owing to its greater width, reached lower down than the left, and so was felt by finger in vagina. They were uniformly enlarged, externally of a yellowish-grey colour, and had the shape of a common chamois leather purse. Their tissue was softer than natural, and on both surfaces there were deep longitudinal sulci, with an occasional cicatrix. The right ovary contained a cyst, not bigger than a large pea, which was slightly raised above the posterior face, and had ramifying over it a few small vessels.

The left ovary contained three such cysts, and they appeared to be aborted Graafian vesicles. Thus their number would harmonise with the non-appearances of the catamenia. There was attached to the right broad ligament, between the fimbriated end of the fallopian tube, and the outer margin of the ovary, a fluctuating sessile cyst, of a pear-shaped form, and about the size of a plover's egg. It was felt by vagina and probably had originated in one of the tubules of the organ of Rosenmuller. The uterus was not congested, and had all the appearances of a virgin uterus. The exact measurements of the ovaries were as follows:

Right ovary.—Width at base, $1\frac{1}{2}$ inch; width at apex, $1\frac{1}{8}$ inch; length, $1\frac{5}{8}$ inch; thickness, $\frac{1}{4}$ inch.

Left ovary.—Width at base, $1\frac{1}{2}$ inch; width at apex, $1\frac{2}{8}$ inch; length, $1\frac{2}{8}$ inch; thickness, $\frac{1}{4}$ inch.

Weight, 170 grains.

Dr. T. C. Hayes next exhibited a fatty placenta, taken from a patient who furnished a very instructive history. Her age was thirty-seven years, and she was married sixteen years. There were no grounds for any suspicion of syphilis. At first she had had three living and perfectly healthy children. During her fourth pregnancy, when seemingly in excellent health, she received a severe fright from an accident happening to her husband, and shortly afterwards was delivered prematurely of an eight months' stillborn fœtus. Her health then began to fail, she lost colour, and became "thoroughly weak." In succession followed twelve stillborn children, nearly all of which had reached at least seven months' maturity. During the last four or five pregnancies she had suffered from serious and frequent hæmorrhages, dating from the third month of gestation and occurring sometimes every fortnight, sometimes after longer intervals till labour supervened. The hæmorrhages were quite sudden, without any recognisable cause, and came in gushes, not infrequently during the night, unattended with pains. In the beginning of last February the patient came under Dr. Hayes' care. She was then in the fourth month of pregnancy,

and had had two serious loses of blood. She was very anæmic, and her condition one of extreme debility. Rest was enjoined, and she continued to take till her confinement, which took place ten days ago, fifteen minims of liquor ferri perchloride three times a day. Her colour and strength rapidly came back, and there was no return of the hæmorrhage. A fortnight before her labour she was seen by Dr. Hayes, at King's College Hospital, when the fœtus was alive, and its movements continued to be distinctly felt up to six days prior to labour. The labour was at term, and the fœtus, though small, bore all the appearances of maturity, and seemed to have been dead about a week. Since the birth of her last living child gestation had never continued so long.

The placenta was small, weighing only 12½ ounces. It had a pale yellowish appearance, and contained little blood. Nodules of fat, characteristic to the naked eye, were studded over the maternal surface, especially along its margin. The fatty change was most advanced towards this surface, a large portion of the decidua being merely an aggregation of oil-globules; the adjoining fœtal villi with their investing chorion were seriously affected, but those close upon the fœtal surface were simply granular in appearance. Dr. Hayes referred to Dr. Barnes' investigations of this disease, published in the 'Medico-Chirurgical Transactions.' He considered the disease in this case to have originated in the maternal portion of the placenta, this view being borne out by the weakly condition of the patient, and microscopical examination. No doubt the previous premature births and the hæmorrhages had been due to the same condition of placenta. He could not regard the disease as originating in inflammation—placentitis. This was contrary to all analogy. It was a degenerative change, occurring under the same conditions which induced fatty hearts, fatty kidneys, and fatty arteries in the brain. Should the patient become again pregnant the propriety of artificially inducing premature labour would be considered.

Dr. Heywood Smith thought the cyst in the ovary was sufficient to account for the prolapsus.

Dr. HAYES thought it could not be explained in this manner.

The PRESIDENT requested Dr. Hayes and Dr. Aveling to examine the case of prolapsed ovaries.

Dr. BARNES, in reference to the case of fatty placenta, thought that the case proved that the disease may originate during the life of the child. This notion had been controverted; it was said to take place after the death of the child, but it was hardly possible that all this mischief could have occurred in the short time after the death of the child. It was much more likely to have preceded this event, and, in fact, caused the premature destruction of the child. As regards the change commencing in the maternal or fœtal portion of the placenta, it affected mainly the villi of the chorion. He had not stated that the change arose from placentitis; he likened it to fatty degeneration of other organs. The case was full of interest and had important pathological bearings.

Dr. ROGERS.—Mr. President and Gentlemen, I beg to place before you this most interesting specimen for examination, which cannot, however, give you any true idea of its appearance when looked at *in sitû*, ere it was cut into and its contents removed. I regret much I did not take a drawing of it, as it looked like a pregnant uterus at about the fifth month. The history is briefly as follows:—Mrs. M. J. S—, a pale exsanguineous-looking person, became a patient at the Samaritan Hospital, June 17th; had been married nine years; has had only one child, aged 7; has never been pregnant since, nor has had any miscarriages. Had not been well for a long time past, having felt about a year or more pains at times in the lower part of the abdomen, especially at the catamenial epochs, when her losses had been very great. For some months past thought she had somewhat enlarged in the abdomen and had felt a tumour there about seven weeks before she came in; believes it might have been there much longer; does not think herself pregnant, as she has been so profusely regular. She was seen and examined by four of my colleagues at different times, and it was thought to be a fibroid of the uterus; it was movable, and palpation outside was immediately felt by finger on cervix and bulging part of swelling round it. This swelling did not quite fill up the pelvis on left side; we all

thought that the case was a fibroid uterus. It was agreed to pass a sponge tent into cervix preliminary to after-treatment. This produced but little dilatation, and a sea-tangle was introduced. The finger could then better examine the interior. The back wall was then felt to be hard, apparently solid; front wall thin. Sound never was passed beyond three inches and a half. On making another examination Dr. Routh thought he felt below the cervix a feeling of fluctuation, or at least of softening, as compared to the first examination, and that it might prove a fibro-cystic disease. It was then agreed Dr. Greenhalgh should see the case, which he did, and thought it to be a fibroid of posterior part of uterus, which might be treated by enucleation. That night she was attacked with sickness and more pain was felt in abdomen; the temperature and pulse went up to 104½ and 135, which again gradually declined under the use of salines and about a grain of opium. Nothing else was done during these few days but syringing out the vagina with Condy, or a little solution of iodine in water.

On the 27th ult. she expressed herself as feeling pretty well, quite free from pain, and took barley-water, beef tea, and brandy and water occasionally. In the evening, about 7, she suddenly complained of faintness and icy coldness. Hot water was applied to body, some stimulants given, but she gradually died out, apparently from syncope; when I arrived she was dead.

Post-mortem twelve hours after death.—Abdomen prominent, body well nourished. On opening abdomen a large central tumour was seen, in appearance like a pregnant uterus of five months. It was movable; a quantity of fluid and some clotted blood was in the pelvic cavity. When the tumour was cut into it was found to be filled with a hard, firm, black mass, which was turned out and examined; it was structureless, parts whitish. The part presented to the Society was then cut out. The uterus is about five inches long, three broad; behind, above, and around the cyst had formed and lengthened out towards right ovary about the size of a child's head. Right fallopian tube closed: on external

surface it seems to pass into right ovary, which contained a hard, *stellated* mass, which may be placental. The cyst appears lined by membrane which may be dissected into two layers. I have since examined several pieces of the so-called stellar mass, and can certainly find nothing more than blood-corpuscles and fibrin; part has certainly a membranous character, and I may have taken a piece of altered fallopian fimbria when I found an organized appearance, but I shall be glad to allow any portion to be taken and examined by the Fellows.

Dr. TILT inquired when the hæmatocele originated.

Dr. ROGERS said the patient had experienced pain and suffering in the lower abdomen for nearly a year.

Dr. ROUTH stated that when he saw the body on the post-mortem table the breasts presented all the signs of pregnancy, and on opening the abdomen it still looked as if she were pregnant; and even now it was a question whether it was not a case of extra-uterine fœtation. If it were a hæmatocele there must have been a gradual oozing of blood for six or seven weeks and a sudden increase on the day of her death. The lining membrane of the uterus did not present the appearances of a decidual membrane.

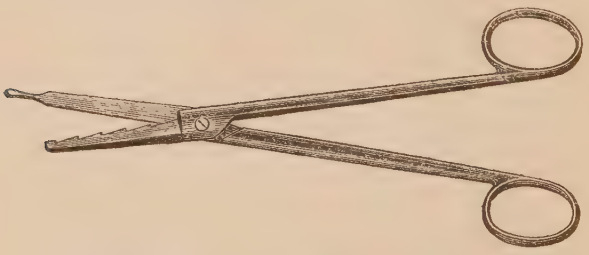
Dr. BARNES related that he had seen two cases of hæmatocele during the last month. In one, ending fatally, the cyst was opened during life per vaginam, and blood removed; the cyst was curiously mobile. In the other case no opening was made into the cyst. He considered formerly that the danger of the cyst rupturing into the peritoneum was small, but now he thinks it more serious. If the hæmorrhage goes on, and the cyst increases in size, puncturing should be resorted to. In another case where the hæmatocele was clearly mapped out spontaneous opening into the roof of the vagina occurred, and the cyst gradually contracted and closed, the hæmatocele disappearing.

Dr. PROTHEROE SMITH asked Dr. Rogers if he had, from the history of the case, or from the ordinary symptoms which indicate the formation of hæmatocele, suspected the nature of the malady before death. He had now a similar case in the Hospital for Women, which was admitted with a large swelling occupying the left sacro-iliacal fossa, and extending beyond the median line to the right, having the semi-elastic doughy feeling which indicates hæmatocele. Active symptoms of great constitutional distress having supervened, with a high temperature and quick pulse, he used the aspirator per rectum, and the escape of broken-down coagula of blood declared the diagnosis, and was followed by

amelioration of symptoms, and a continued discharge of fetid black matter.

The PRESIDENT remarked that as there seemed to be some obscurity about the case, he would refer it to Dr. Rogers and Dr. H. Smith.

Dr. PROTHEROE SMITH exhibited some newly invented serrated scissors, manufactured by Messrs. Meyer and Metzler, which, by transfixing and cutting clean through any tissue, insured a smooth and definite incision to any previously determined extent. One pair was straight, having one blade probe-pointed, for dividing the cervix uteri. Another was curved to facilitate the removal of condylomatous growths



or tonsils. It was found also effective in cutting bony structures. He had recently used it in extending the abdominal wound in a case of ovariotomy, making smooth and even edges. Dr. Richardson's toothed scissors were efficient for perforating and tearing as in mastication. Dr. Protheroe Smith's instrument, on the contrary, was intended to insure a clean cut through any tissue to a given extent.

Dr. BARNES referred to Kuchenmeister's metrotome scissors, one blade of which is provided with a small recurved hook, as being similar in principle. Dr. Richardson's scissors answered well, but did not give additional security against bleeding.

Dr. AVELING thought that in cases of hysterotomy there was an objection to the enlargement of scissors, as they produce disfigurement and distortion of the parts subsequently, and divided portions of the cervix which ought not to be touched.

Dr. CHAMBERS exhibited a specimen of complete inversion of the uterus. The case occurred in the practice of a midwife. The patient, æt. 27, was delivered of her second child

at 3 p.m. on May 9th. Half an hour after post-partum hæmorrhage set in, the placenta having not yet been expelled. The midwife exerted traction on the cord; the patient had severe abdominal contraction, uttered a violent shriek of pain, and a round ovoid body protruded from the vulva. Severe hæmorrhage continued. Dr. Chambers being out at the time, his nephew, Mr. M. W. Chambers, attended for him. He found the patient cold, gasping, moribund. The placenta was peeled off, and an attempt made to return the uterus, but as the patient showed signs of sinking rapidly, further efforts were desisted from.

On making a post-mortem examination twenty-four hours afterwards, rigor mortis being well marked, the body was well nourished; complete inversion of the uterus was present.

It was a question whether transfusion could have saved the patient.

Dr. Chambers also exhibited a specimen of retroversion of the gravid uterus. The patient from whom it was taken was 32 years old, married; mother of four children; one miscarriage; last confinement three years and a half. The catamenia had been regular until November last, when they ceased. She believed herself pregnant. In February, whilst hanging clothes upon a line, a pig bit her foot and frightened her a good deal. She experienced pelvic pain, and after a week had vaginal discharge. She rested up and went on well for a week, when during the night she had sudden and severe abdominal pain, the abdomen began to swell, and she lost health. Seven weeks after the pain first commenced; the abdomen measured thirty-nine inches in circumference at the umbilicus. The case was supposed to be ovarian; the tumour was tense and communicated a thrill of fluctuation. The posterior vaginal wall was protruding; a dirty fluid blood escaped from the passage. Twelve pints of urine were drawn off by the catheter; it was charged with blood, but had little or no urinous smell. The tumour in the abdomen decreased considerably after evacuating the

bladder. The patient stated she had passed water the evening of admission. She was much exhausted, and the replacement of the retroverted uterus was left until the next day. Dr. Barnes and Dr. Aveling saw her at this time; the pulse had risen to 144, the abdomen was exceedingly tender, and the patient was exsanguine. On the 28th the abdominal tumour again reached to the umbilicus, the vagina being still occupied by a large ovoid body which protruded the posterior vaginal wall through the vulva, and the os uteri was high up behind the pubis.

The uterine sound was passed upwards and forwards three inches, and the case was thought to be a hæmatocele; the hand was passed into the vagina and a fœtus of four or five months removed. The uterus was fixed in the pelvis.

Transfusion with lamb's blood to ten ounces was performed. There was a faint attempt at restoration, with much excitement. The patient died one hour afterwards.

At the *post-mortem* an elastic tumour was discovered in the lower abdomen, which proved to be the bladder, and contained two pounds by weight of black clot; the fundus was hardened and infiltrated, and the hæmorrhage seemed to have taken place from this. The transverse muscular fibres were very clear. The uterus was retroflexed. No trace of peritonitis was found.

Dr. Godson referred to a case of retroflexion of the gravid uterus with cystitis when the whole of the lining membrane of the bladder came away, exposing the muscular fibres. The patient went to her full time, was safely delivered, and is still living, though she cannot hold her water for more than a few minutes.

Dr. Barnes stated that he considered the patient died from retroversion of the pregnant uterus; though there were symptoms of peritonitis, none were detected post-mortem. She died from exhaustion and uræmia.

The President requested Dr. Chambers and Dr. Hayes to examine the specimen further and report upon it.

INTRA-UTERINE TUMOUR, REMOVAL, SUBSEQUENT PREGNANCY, DELIVERY BY TURNING, POST-PARTUM HÆMORRHAGE, RECOVERY.

By Dr. Wynn Williams.

Mrs. S—, æt. 34, presented herself at the out-department of the Samaritan Hospital, July, 1872, suffering with severe hæmorrhage from the womb, which she stated had been going on for twelve months. She had had two children, the last one at Christmas, 1870; instrumental delivery; child dead. Had a miscarriage the May following, when, as she stated, she nearly died of hæmorrhage; on examination the abdomen was found to be as much distended as a woman's would be at the full term of pregnancy. On examination per vaginam the os uteri was found to be open, admitting readily the finger within the cavity of the uterus, where could be felt a solid mass protruding slightly through the os, round which the finger could be passed as far as it could be inserted. The tumour had more the feel of a polypus than a fibroid, and was contained within the cavity of the uterus. She was sent to the in-department and became a patient of Dr. Routh, who, in July, proceeded to remove the tumour with the écraseur. Chloroform having been administered, the tumour was pulled down by hooked forceps, and the wire of the écraseur pushed up into the uterus as far as possible, and a slice was cut off. In a fortnight the tumour having again protruded through the os uteri the same means were had recourse to for the removal of another portion; when this was done it was found that another portion could be pulled down. This was sliced off, and again another, and on the following morning another large portion was found lying in the vagina and removed. The connection of the tumour with the uterus having been cut through on the previous day, this portion was forced out by the contraction of the uterus. She made an excellent recovery and became preg-

nant, and in the month of May, eleven months after the operation, aborted at about the third month, when she lost a great deal of blood. She again became pregnant in August last, and requested me to attend her in her confinement. At three months she suffered from extreme œdema of the lower extremities, which was removed easily by diuretics, &c. Nothing else untoward occurred. On the morning of the 25th of May I was summoned about 2 a.m., and found that labour pains had set in early on the previous day, being as she described them in the belly. There was more show than usual. On examination per vaginam the uterus was found to be so high up as to be out of the reach of the finger. Labour pains of the same character continued until ten in the morning; in fact, everything remained *in statu quo*. I then introduced my hand into the vagina and found the os uteri very high up, looking towards the sacrum and fully dilated, the head presenting. The uterus was entirely in the cavity of the abdomen, and appeared to be prevented by some adhesion from descending into the pelvic cavity, the contractions having apparently little or no power to expel the child. I determined not to interfere at present. On my return I found everything in much the same state as I had left it in the morning, with the exception that the pains were weaker. I waited until eleven o'clock, when I determined to deliver if possible by turning. Having placed the patient under the influence of chloroform, I introduced the left hand and endeavoured to push up the head with the help of the right hand externally without effect. I then forced my hand through the membranes into the uterus and got hold of one of the feet, but still could not get the child round; I managed to get the foot outside the uterus and that was all I could do, being right at the top of the vagina. I passed a loop of good strong tape round the ankle and withdrew my hand, and having rested, resumed my labours, the patient being still under chloroform, and after making steady traction by means of the tape, manipulating the abdomen the whole time with the right hand externally, I succeeded ultimately in getting the head up and the feet down. I now administered a full

dose of ergot, and by making steady traction on the feet whenever there was the semblance of a pain (which I may here mention never appeared to have any expulsive power) I succeeded in gradually extracting the feet and buttocks. It was however some time and with great difficulty that I was enabled ultimately to deliver the head, the secundines following almost immediately, being forced from the vagina by my right hand, the child, which weighed nearly ten pounds, being of course dead. There was not more blood lost than usual. The uterus contracted fairly, but instead of being in its usual position it was firmly fixed in the left hypochondriac region just under the rib. A bandage was placed firmly round the abdomen, with a cushion placed over the uterus. A pretty considerable rent in the perineum was stitched up with three sutures. The patient was made comfortable, brandy having been administered occasionally throughout these long and tedious operations. I watched by her bedside for about an hour for fear of hæmorrhage, when, as everything appeared to be going on satisfactorily, I administered half a grain of morphia and retired to the next room, going every now and again to see how the patient progressed, two nurses being continually on the watch. In about three hours after delivery, when just about to depart, I was suddenly summoned to the patient by one of the nurses, who thought she was dying. The attention of the nurses had been called to her state by hearing fluid falling upon the floor from the bed; in fact, the bed and carpet were a pool of blood. My patient was breathing, but I could feel no pulse at the wrist; whilst one of the nurses administered brandy, the other pressed firmly on the uterus, and I introduced my hand into the uterus, which was not distended with clots, but I could feel the fluid blood welling by my hand. Having with all speed poured out two drachms of Liq. Ferri Perch. with an equal quantity of water, and saturated a sponge with a string attached to it, I passed it up with my left hand into the uterus and left it there. I felt the uterus contract and the flow of blood cease immediately on its introduction. From that time not a drop of blood was lost; cold was applied to

the abdomen by means of a wet towel flapped upon it; brandy was also freely administered. I had now the immense satisfaction of sitting down and watching the gradual return of the pulse at the wrist, and to feel positive that the patient had been snatched from the very jaws of death. The sponge was withdrawn on the following day. From this time everything progressed favorably; the vagina was frequently syringed out with a weak solution of iodine. The stitches were removed on the seventh day, the rent having completely united. I ought to state that the introduction of Holt's winged india-rubber catheter, which was readily retained in the bladder until it recovered its tone, was an immense convenience.

The PRESIDENT remarked that the case was interesting as showing the occurrence of pregnancy after the removal of a fibroid of such large dimensions, and the influence of the iron in restraining the hæmorrhage.

Dr. AVELING thought that the method of using the iron, leaving the sponge in utero, was a questionable proceeding. The contraction of the uterus rendered the withdrawal of the sponge difficult, and if the string attached to it should break, it would be very awkward. He considered it a bad practice.

Dr. ROGERS thought the whole of the mass had been taken away at two sittings—one in the evening and one next morning.

Dr. HEYWOOD SMITH thought that, in operating for fibroids of the uterus, it should be done rapidly, as Dr. Marion Sims suggested, so as to avoid septicæmia.

Dr. ROUTH remarked that when matters were retained in utero we did not get septicæmia; it was only when they were partially expelled in the vagina. The application of plugs dipped in tincture of iodine to the surface, renewed every three or four hours, would succeed when carbolic acid failed in averting septicæmia.

The PRESIDENT alluded to some cases where a practitioner in Cuba injected a solution of iodine and iodide of potassium into the uterus immediately after parturition, with a view to prevent puerperal mischief.

Dr. CLEVELAND doubted the propriety of administering morphia or iron after delivery, especially if the uterus had not properly contracted. He would have preferred to watch the patient.

Dr. WYNN WILLIAMS replied. Dr. Aveling is entirely mistaken in supposing there is any difficulty in removing the sponge saturated with perchloride of iron. Dr. Wynn Williams had always found it forced by the contractions of the uterus into the

vagina, and most easily removed by slight traction on the string attached to it, and so far from considering leaving the sponge in the uterus bad treatment, he believes the success of his method may be, and he thinks is, greatly to be attributed to it. To introduce and leave a sponge or any other material saturated with perchloride of iron in cases of early abortion and in non-pregnant uteri, he could well believe to be bad practice; in such cases the uterus should be merely swabbed out with the iron. As regards the remarks made by Dr. Routh on the great benefit to be derived from the use of iodine as an antiseptic, he fully concurred, and stated that he (Dr. Wynn Williams) was, he believed, the first to point out the powers of iodine as an antiseptic. He said when iodine was present septic poison could not be, and to the use of it he attributed the fact that he had never had a case of septicæmia after an operation. He also considered that it could not be too generally known that tainted meat washed with a solution of iodine is rendered perfectly wholesome.

ON VAGINISMUS (DYSPAREUNIA OF DR. BARNES).

By Dr. W. Schnegierief,
PHYSICIAN TO THE MOSCOW HOSPITAL.

Gentlemen,—At the present meeting I should like to direct your attention to a very interesting disease of the female genital organs, viz., vaginismus. It has, doubtless, a claim upon our consideration, for up to the present day there exists a great variety of opinions concerning it, and moreover it has already been stated by Dr. Sims that no other disease has so fatal an influence on the matrimonial state, for it can change love into aversion.

Before I proceed to the cases met with in my own practice I will give you a brief account of the different views respecting this subject.

Dr. Sims has generally been considered as the first who discovered and described this disease. I think this is not quite correct, for a year previously (1860) Dr. Simpson read a paper in the Edinburgh Society, entitled "Vaginodynia, or a Painful Vascular and Fascial Contraction of the

Vaginal Canal," from which we see that Dr. Simpson had had the opportunity to study two different forms of this disease.

The chief symptom of the first form was a transverse or longitudinal string of different sizes and tenseness and very painful to the touch, an inch above the vaginal aperture. This excessive sensibility was considered by Dr. Sims as the pathognomonic sign. The second variety consisted in the tenderness of spasm of the whole vagina or of the musc. sphinct. vaginæ only. The result in both cases was difficulty or impossibility of sexual intercourse. Simpson explained the existence of the string as the result of a spasmodic contraction of the anterior edge of the musc. levat. ani, or of the processes of the pelvic fascia, caused by their subacute inflammation.

The other variety he ascribed to the spasmodic contraction of the musc. sphinct. vaginæ, resulting from a hyperæsthesia vulval or vaginal, or from an irritating eruption, erosions or some other pathological condition of the mucous lining.

For both forms of the disease Simpson adopted the following method of treatment: if the case was persistent, he used tenotomy ; if it was of a less serious kind he resorted to a rapid, sudden dilatation and rupture of the contracted muscles ; and finally, if the suffering was but slight, he prescribed local sedatives—suppositories of chloroform. He obtained the most brilliant success in all cases.

Thus we see that Dr. Simpson was well acquainted with this subject, and without any partiality we must acknowledge him as the first who described this disease, in 1860.

In 1861 Sims read a paper in the Obstetrical Society of London which excited the most lively interest in all gynæcologists by its vivid description of the suffering in question.

We find a full development of his opinion regarding it in the 'Clinical Notes on Uterine Surgery,' 1866. He considers vaginismus as an extraordinary hyperæsthesia of the hymen and introitus vulvæ, connected with a strong and involuntary spasmodic contraction of the sphinct. vaginæ, so

that coition becomes impossible. This spasm can be produced by the slightest touch of certain points. The vaginal orifice is altogether tender, but the sensibility increases about the meatus urinarius, about the aperture of the canal of the Bartholinian glands, and on the posterior commissure. The external or anterior surface of the hymen is sensitive, especially at the base; on passing the sound carefully the internal or posterior proves to be insensible. The touch of the exterior surface not only occasions pain, but an involuntary spasm of the musc. sphinct. vaginæ and ani. Thus the tenderness must be considered as a diágnostical symptom and the spasm as a pathognomonic one. "The most perfect examples of vaginismus that I have seen were uncomplicated with inflammation; but I have met with several cases in which there was a redness or erythema at the fourchette."

Usually the hymen is thick and voluminous and its free edge has the tenseness of a stretched string. Considering the analogy between this contraction and laryngismus, where a similar spasm exists, "I call this painful spasmodic contraction of the mouth of the vagina, vaginismus."

The number of his cases amounts to thirty-nine. As to the cause of the disease he always ascribed it to a new formation of nervous elements (neuromata), though in spite of repeated microscopical investigation of the hymen and other parts performed by his friend, and one of the ablest American pathologists, Professor Alonzo Clarck, no new formation has ever been detected.

According to Sims the treatment must consist in the excision of the hymen, in the incision of the vaginal aperture, and subsequent dilatation by specially adapted bougies. "The last is useless without the first two, but is essential to easy and perfect success with them."

The operation is performed under anæsthesia. This is a brief summary of the views of the American gynæcologist Sims.

In 1861, on the 5th of November, these views were communicated to Scanzoni by Tyler Smith, and the former began to study the subject most zealously. In the course of

three and a half years he saw thirty-four cases, which led him to an opinion greatly differing if not quite opposed to Sims' views. Not one of his thirty-four cases was free from more or less redness, erosions at the os vaginæ; carunculæ myrtiforme in fossa navicular were thick, œdematous, and deprived of their epithelium; in a word, no one of these cases was free from inflammation of the vaginal entrance.

Scanzoni considers this inflammation not as a casual complication, but as the primary affection, caused by traumatic violence during the first attempts to sexual connection, the fault being rather on the side of the man who ignores the direction of the vaginal canal. This assertion is sustained by the fact that in eleven cases out of these thirty-four, the men had had no sexual connection before their marriage. "I know many cases," says Scanzoni, "where young or vigorous but inexperienced men attained the desired aim much later than those who had omitted no occasion to attain a certain dexteritas cacundi before they were married, though with some loss of strength and health."

This ignorance on the part of the man causes an inflammatio ostii vaginæ, which in its turn calls forth the pain and the spasm of the musc. sphinct. vaginæ, levator ani, and others, and renders coition impracticable.

The treatment, therefore, must before all consist in the prohibition of intercourse; secondly, in the cure of the inflammation, which can be attained by local sedatives; thirdly, by the dilatation of the vaginal entrance by means of bougies and speculum; and, lastly, to prevent a recurrence of the disease, it is necessary that the wife should herself give a proper direction to the male organ.

As we see, these opinions are essentially different. According to Sims the spasm is occasioned by a hyperæsthesia, and according to Scanzoni inflammation is the cause of the spasm as well as of the hyperæsthesia. Sims considers hyperæsthesia as the predominant symptom, and says that inflammation is only occasional, whereas Scanzoni, on the contrary, considers the inflammation of the vaginal entrance as the first symptom and the hyperæsthesia and spasm as secondary.

Consequently, I think we may be allowed to say that, according to Sims, vaginismus is a pure form of hyperæsthesia, whereas according to Scanzoni it is an inflammatory one. Scanzoni considers the unsuccessful attempts at coition as the real cause of the disease, and Sims supposes them to be a consequence of the suffering. The treatment proposed by them is of an entirely different character. Sims' method is chirurgical, bloody, Scanzoni's is therapeutical, but both conclude it by dilatation. Sims expresses the conviction that no cure is possible without the excision of the hymen and the incision of the vaginal mouth, and Scanzoni says decidedly "that any case of vaginismus can be cured without operating."

If we want to know the reason of this entire opposition in the views of those two authors we must not expect to find it in the different nature of their cases; we shall see that it lies in the polemical tone of their papers, especially characterising that of Scanzoni.

For instance, out of Sims's own words quoted above, we can see that he denies the presence of inflammation in all pure forms of vaginismus, and at the same time, when describing in his book on surgery one of such cases he says, "The seat of the hymen was red, inflamed, thickened, indurated, and exceedingly sensitive."

Reading Scanzoni's work, we also find more than one contradiction. For instance, "we have frequently seen that in spite of the normal condition of the sexual organs, they were sensible to the slightest touch" (p. 268).

If unsuccessful attempts at coition were the constant cause of vaginismus it would be natural to suppose that if it took place and was followed by gestation and parturition, vaginismus could not perish. However, it is proved that vaginismus continues to exist after coition has been fully performed and normal childbirth had taken place? such is the case recorded by Sims.

Scanzoni was well aware of this fact, but did not pay any attention to it. Here I conclude the critical notice of these two different views. I endeavoured to show partly the entire disaccordance in the opinions of these two authors, and partly

to make you aware of the contradictions in them, which even a superficial reader cannot help noticing. And now I will proceed to my own cases, which, as it seems to me, will enable us to find an explanation for the mistakes of those two authors, and being very typical will help us to reconcile views till now considered as completely adverse to each other.

Case 1.—Patient an unmarried person of 30 years of age, complaining of a retention of urine. Her menstruation was regular, and a detailed questioning showed no failure in the general health. Two and a half years ago she had been frightened by a fire during the night, and since then noticed the following symptoms. Micturition, which had always been free before, was suddenly stopped by a violent pain in the external genital parts. When the pain subsided water could again be passed freely, but the act of micturition caused pain and spasm of the urethra, and consequently retention; this was repeated a few times until the whole of the urine was passed. However, sometimes this did not occur, and she passed water as usual. To avoid this she tried to pass water frequently, for if the quantity was less she felt the pain only once, whilst a larger amount made her suffer repeatedly. This condition had a depressing effect upon her mind and body, and she looked very bad indeed. The local investigation showed that the hymen was whole and had a triangular shape, with rounded edges; its base was turned towards the urethra, so that there existed a semilunar aperture between the latter and the base of the hymen, which appeared to be quite normal. No inflammation or traumatic damage could be detected; it was even, thin, and rather dry. The os of the urethra was also perfectly normal, neither red nor swollen, and without any erosions. The investigation of the bladder gave an entirely negative result; the catheter could be passed without any pain, and no deviation of the health could be remarked.

When I proceeded to the investigation of the vagina and the uterus, and passed the finger through the os hymen, the patient shrieked from pain, and at the same time the finger

in the vagina was slightly pressed by the spasmodic contraction of the muscæ sphinct. vaginæ. The pressure was so slight that it did not prevent me from investigating the uterus, which was anteflexed.

At first sight it was natural enough to suppose that the suffering was occasioned by the displacement of the womb, for a deviation in the functions of the bladder frequently depends on the flexion of the uterus (Hewitt). Therefore, I proceeded to redress it by means of lint pledgets. But when I brought the pledget into contact with the hymen, a stronger spasm led me to suspect vaginismus. I began to investigate the hymen most carefully, and obtained the following result. When I touched with the end of the sound the middle point of the free hymenal edge, a spasm came on and the patient stated that she felt the same sensation as during the retention of the urine. Besides this point I found two other places which were touched with the same effect. The rest of the external part of the hymen was insensible to the touch. Consequently I concluded that the arrest of micturition depended on the irritation of these spots. To make sure of it I tried the following experiment. A catheter was passed into the bladder, and whilst left there I touched one of the spots alluded to, and either the urethra tightened round the catheter, or if the catheter was not far advanced in the bladder, it was violently pushed out. Further, when I withdrew the catheter and dropped some of the fluid upon the same spots, the result was similar.

From this I drew the following conclusion. It is well known that when women pass water a part of it escapes between the large and small lips, and thus reaches the hymen. Consequently in this case the spasm and the retention of the urine were called forth as soon as the fluid reached the hymen, and the irritating cause (the urine) being eliminated the flow became unrestrained. It is easy to understand that in a case like this one the treatment must consist in the excision of the sore points. I proposed to operate on the patient; she promised to return to the hospital, but I have not seen her since.

Considering this case we arrive at the following most interesting conclusion. The patient was a virgin of thirty years, and as much as could be made out by local investigation as well as by questioning no attempts at coition were ever made, and still in opposition to Scanzoni's opinion vaginismus existed. The hymen was normal, not inflamed, and this disagrees with Scanzoni's theory, but moreover, it was neither thickened nor tense as a string, in direct opposition to the opinion expressed by Sims. Hitherto no author mentions that vaginismus can be accompanied by a contraction of the urethra, though all assert the spasm of the vagina and rectum, and this case is interesting because it shows that it does take place.

Thus this case, though rather exceptional, confirms Sims' theory. There were no modifications in the genital parts, no attempt at coition had taken place, and yet the spasm existed; it is obvious that it was caused by a hyperæsthesia.

Case 2.—October 16th (1872) I saw at the Maternity a young person, aged 20, who complained of pain in the lower part of the abdomen, extending to the groins and thighs, of leucorrheal discharge, and of the impossibility of intercourse. Upon questioning her I learned that she had been married four years and was childless. Her first menstruation appeared at 14 years, and the discharge has always been moderate in quantity, painless and coming on regularly every four weeks. After having been married six months she fell ill; severe pain in the lower part of the abdomen made coition disagreeable and at last quite impracticable. At the same time the catamenia were either too scanty or too profuse, and were always accompanied by strong pain. Coition was prevented by a painful spasm of the vagina, ending in convulsions and syncope, and if insisted upon the spermatozoa were expelled from the vagina with a gushing noise.

This circumstance became the source of displeasure on both sides, and after a short lapse of time brought husband and wife before the court of justice.

Local investigation showed that the fourchette, the poste-

rior commissure, and the fossæ navicularis were red, covered by erosions, and very tender to the touch. The mouth of the vagina was red, swollen, and partly excoriated. It was quite impossible to pass the finger into it, so strong was the pain and spasm. The patient was anæsthetised and nothing prevented a full investigation. The uterus was slightly retroverted. Passing the speculum I noted vaginitis subacute, the cervix and cervical canal covered by livid œdematous granulations partly covered by pus. It was a fine case of endocervitis, and the treatment was to consist in the cauterisation of the external os uteri and the cervical canal (acid chromic). The erosions of the vagina and the fourchette were touched with some Liq. Fer. Sesq. Chlor.

The general health was affected by fever and an acute catarrh of the stomach, for which I prescribed soda water and Arg. Nitric. in pills. The patient returned eight days later, and I noted that the fever and the acute catarrh had subsided, the appetite was improved, and the erosions on the fourchette and on the fossæ navicularis as well as in the vaginal mouth were healed; the redness was less intense. The finger could be introduced though with difficulty because of the still existing spasm. However, averting the attention of the patient and using considerable force I succeeded to introduce the speculum, but it caused severe pain. The granulations, were more superficial, redder, and less œdematous.

The same treatment was continued after another lapse of eight days; the passing of the finger was quite painless, the spasm scarcely to be noticed, and the redness of the external parts had nearly subsided. Very little force was necessary for the introduction of the speculum, the granulation had quite disappeared, but the epithelium was wanting.

Since then the patient returned a few times more, the catamenia was regular, and coition could be performed without any pain. But the already existing family discord brought on more trouble to the poor woman; her husband had begun to drink, and treated her so roughly that the former pain in the lower part of the abdomen returned, and

sexual intercourse had to be given up once more. When she consulted me I found that vaginismus existed no more, but endocervitis was very acute. As soon as it was cured coition became easy, and the last time I saw her she was perfectly well. I consider this case as typical and interesting for the following reasons. Having seen the patient very often I could ascertain that the constant cause of the vaginismus was the inflammation of the cervical canal (endocervitis), for the symptoms of vaginitis subsided after her first visit to the hospital, but the spasm persisted until the endocervitis was quite cured. Further, the symptoms of the vaginitis were less marked than those of the endocervitis, and could be considered as secondary. It is obvious that vaginismus was occasioned by an inflammation of the cervical canal, and thus this case fully agrees with Scanzoni's theory, for the cause of the disease was material and organic.

A subsequent dilatation advised both by Sims and Sanzoni had not to be recurred to.

Case 3.—Patient, 25 years, was brought to the hospital by a midwife, and gave the following account of her state of health. As a child she had always been well; menstruated at 13; since then catamenia were always regular and lasted six days. At 17 she suffered from hysterical attacks ascribed by the physician who attended her at the time to a catarrh of the stomach, which being cured, the fits returned no more. Five years ago she was married to a gentleman rather advanced in age (43). During the first week after her marriage no intercourse took place, for in spite of all his efforts her husband was impotent and no violence could be committed. After this period the impotentia on the side of the husband subsided, but all attempts to coition were fruitless for the wife felt such strong pain at his approach, that it had to be given up altogether. This state of things lasted five years; all their repeated attempts at different intervals were of no avail, and it is easy to understand that this kind of life had a very bad influence on the health of both. The husband looked older than his age, and the

lady was very nervous and hysterical. She had no idea of the cause of her disease, and seeing her husband suffering through it, began to meditate suicide, for life to her was a constant trial. The poor woman could not refrain her tears whilst telling me her sad story. A month previously she had consulted a physician, who had prescribed the use of narcotics, pessaries, and dilators. It is scarcely necessary to say that neither could be employed, for every touch of the genital parts occasioned the most severe pain.

The patient was laid upon a table and I proceeded to the local investigation. Parting the large lips I saw that the hymen did not exist. The small lips were quite normal, though less red than usual, and if touched gently free from pain. The meatus urinarius and the urethra were equally normal and not tender to the touch. In the groove between the large and small lips, nearer to the latter, on the posterior part of the vulvæ, eight scattered papillæ could be detected ; their ends were widened and ramified, even and rough from the loss of the epithelium. They were of a livid bluish colour rather œdematous, but no blood oozed out of them. When I touched them with the sound or with a camel's-hair brush, the patient complained of a sudden acute prickling pain extending to the lower part of the abdomen. When the irritation was continued, the patient began to tremble all over the body, the face was contracted, the teeth gnashed and the widely dilated eyes filled with blood. Carefully parting the labia minora, so as not to touch the papillæ, I could see that the vaginal mouth had its usual appearance. It was quite impossible to pass the finger, for however carefully I tried it the patient shrieked out with pain and escaped from my hands. Therefore I anæsthetised her, but in spite of her full unconsciousness the introduction of the speculum still presented great difficulties. The vaginal spasm and the resistance of the patient were so great that I had to use unusual strength to push it into the vaginal mouth, and could not succeed in separating the blades.

When she awoke from the narcosis she said that she had not felt any pain at all.

I told her that I considered the operative method as the only one able to restore her health, and she gladly consented to be operated upon.

Accordingly, chloroform was administered to a degree of full narcosis; neither pinching nor pricking produced any effect, the limbs were in a state of complete helplessness. During the operation I was assisted by two of my colleagues, three very strong midwives, and two nurses. Parting the large lips I endeavoured to get hold of one of the nearest papillæ by means of a sharp forceps; the patient sprang up, and though held by four persons the pelvis could not be brought to a fixed position. Chloroform was again administered as long as pulse and health allowed it. This time I succeeded in getting hold of all the papillæ and cut them out, with the underlying tissue in the form of a long shred, a few lines thick. I had great difficulty in performing that operation, and succeeded in it only by the aid of those who assisted me, and had to use the utmost strength to keep the pelvis steady. When the patient recovered from the narcosis she again said that she had felt no pain whatever. I prescribed irrigation of the sore place three times a day. The first two days after the operation she felt some pain at the touch of the syringe, but the pain was of a quite different character; it was rather dull instead of the former acute sensation. The spasm was as strong as before. After two days more, when the raw spot began to heal, the irrigation produced no pain at all. The finger could be passed through there with a slight pressure. During the investigation I noticed that if the sore place was touched no painful sensation was called forth and the finger could be passed much more easily. The patient told me that now the vaginal spasm was no longer spontaneous, that it was excited by the painful recollection of her former suffering. In order to accustom the vagina to the presence of a strange body I prescribed the subsequent use of sponge tents three times a day. Seven days after the operation I noted the following change: the bared place was nearly healed, the finger was passed freely without any pain, the pressure was very slight. The use of sponge tents was con-

tinued, and nine days later two fingers could be passed and the spasm had nearly subsided. I then advised her to submit to coition, but she told me the next time I saw her, no intercourse took place, because she could not get over her fear. I then prescribed her the daily introduction of the three-bladed conical mirror, and seven days later the matrimonial aim was attained for the first time by this couple who had lived together for five years already. The patient returned no more. I consider this case interesting for the following reasons: 1, the impossibility of sexual intercourse became evident at once without any previous attempts at it, for during the first week of the marriage the husband was powerless; 2, in spite of the many and repeated attempts at coition all inflammatory symptoms were absent; 3, the cause of the disease lay in the papillæ mentioned above, and they were nothing else but the remains of the hymen, 4, the treatment could only be chirurgical, for even under chloroform no dilatation could be performed without the excision of these points douloureux. "I think that this case can be duly stated as a confirmation of Dr. Sims' theory."

I think this paper shows that there are two different forms of vaginismus.

1. The first ought to be designated as pathological or organic. To this belong all the cases where the disease is based on a material and organic change, occasioned by traumatic affections or by any disease, of which inflammation of the vaginal mouth (Scanzoni) is the most frequent, but which can also have their seat in some other part of the female sexual apparatus.

Thus we have reason to doubt neither the cases mentioned by Scanzoni, nor the theory he bases on them; his mistake is to view the question from one side only, to give the same explanation for all kinds of different cases.

The second variety can be designated as the nervous, for it is deprived of all organic material modification and new formation (neuromata), and consists in the hyperæsthesia of the hymen or its remains (Simpson's case is an exception).

To this second variety belong most of Sims' cases and two of mine (1—3).

2. In both varieties we may meet with the spasm of the whole vagina—"vaginismus completus seu totalis," or with a partial spasm, as stated by Simpson, "vaginismus incompletus seu partialis."

3. Our first case proves that the muscles of the urethral canal can partake of the spasm as well as those of the vagina and rectum.

4. It is undoubtedly proved by clinical experience that complete coition and parturition do not annihilate vaginismus.

5. The attempts at coition, contrary to Scanzoni, cannot be considered as a constant cause of vaginismus, though they may call it forth occasionally.

6. Contrary to Sims, the spasm may persist in spite of the anæsthesia.

7. In the pathological cases the treatment ought to be chiefly therapeutical and mechanical. In the nervous, the chirurgical method combined with dilatation must prevail.

8. The incision of the vaginal mouth proposed by Sims cannot be adopted in every case.

The PRESIDENT remarked that he had only met with one case where no tangible cause existed. She was very nervous and subject to epileptic fits. In all other cases some definite cause for it had been discovered, such as ulceration, &. He considered Dr. Marion Sims' operation very rarely necessary, forcible dilatation under chloroform by means of the two thumbs placed back to back being generally sufficient to overcome the obstacle.

Dr. EDIS thought, after carefully perusing the paper, that the deductions drawn from the first case cited scarcely carried conviction. She was a virgo intacta, and was only seen once. The second case seemed due to vaginitis and granular cervix. The paper was a most instructive one, and would form a valuable addition to the 'Transactions,' the cases being given in a clear and graphic manner, and the observations on their pathology and treatment well worthy of perusal.

Dr. JOHN WILLIAMS remarked that in the first case alluded to by Dr. Edis there were three distinct painful spots which, when touched, caused spasm of the urethra. He thought the paper one of great interest.

OCTOBER 7TH, 1874.

EDWARD JOHN TILT, President, in the Chair.

Present—48 Fellows and 8 visitors.

Books were presented by Dr. W. B. Atkinson, Dr. Aveling, the late Dr. Thomas Ballard, Dr. R. Battey, Dr. L. D. Bulkley, Dr. J. R. Chadwick, Dr. E. S. Dunster, Prof. Ercolani, Prof. Halbertsma, Dr. L. Hamon, Dr. Geo. Johnston, Dr. A. Leblond, Dr. Lusk, Dr. Moncoq, Dr. W. L. Richardson, Dr. Marion Sims, Dr. Spiegelberg, and Dr. Stockton Hough.

Dr. George Hoggan was admitted a Fellow of the Society, and the following gentlemen also were declared admitted :—Mr. Oliver Barber (Sheffield), Dr. T. Rowan (Melbourne), Dr. Wm. Thomson (Peterborough), and Dr. Alex. Paterson (Brazil).

The following gentlemen were elected Fellows :—Wm. Clair, M.D. (Jedburgh), W. A. Fitz-Rayne, L.S.A., E. L. Kock, M.D. (Ceylon), Jas. Louttit, M.D. (Greenwich), W. H. Roots, M.R.C.S. (Kingston), and A. R. Ticehurst, M.R.C.S. (St. Leonard's).

And the following gentlemen were proposed for election : —Mr. E. Barber, Dr. John Barclay, Dr. W. T. Greene, Dr. F. J. Hannan, Mr. D. Longrigg, Mr. W. H. Payne, Dr. A. J. Venn, Mr. Harry Wells, and Dr. David Young.

GARMENT SUSPENDER.

Dr. Tilt exhibited some braces introduced by an American firm into this country under the name of "Ladies' Garment Suspender." They consisted of elastic webbing, similar in construction to the ordinary braces, but having hooks attached to the extremities, so that the skirts could be easily fastened on to the braces. They were of service in many cases where the pressure of the clothes on the lower part of the abdomen produced much inconvenience.

REPORT ON DR. DALY'S SPECIMEN.

The uterus is considerably enlarged; its length is four inches; the fundus and body, which are almost spherical, have a circumference of seven inches. On the posterior surface of the fundus is a sessile subperitoneal fibroid tumour about the size of a marble.

By making a longitudinal section the enlargement of the uterus is seen to be due to an interstitial fibroid tumour, which occupies the anterior and posterior walls of the fundus and body, and obliterates their entire cavity save a small portion just above the internal os.

From the posterior wall of the cervix, reaching from one eighth of an inch within external os to a little beyond the internal os, is seen sprouting a ragged, soft, and very hæmatic growth. Nearly the whole of the anterior wall of the cervix has been destroyed by ulceration. The vagina is quite free from disease. The left ovary equals in size a hen's egg, and has undergone multilocular cystic degeneration.

The microscopical appearances of the growth in the cervix are those of medullary cancer undergoing rapid fatty

degeneration. The uterine fibres which lie nearest the mucous surface are everywhere packed with small round cells, whereas those found near the posterior surface of the neck are healthy. Hence the cancer would seem to have originated in the mucous membrane of neck.

Jno. B. Potter.
Thos. C. Hayes.

Dr. Daly thought that the case afforded an important hint as regards committing oneself to a hasty opinion on the diagnosis. Had any operation been attempted the result would probably have been fatal.

Dr. Wynn Williams thought that had the patient rallied from the effects of the hæmorrhage, dilatation with a view to operation might have been resorted to.

Dr. Hayes thought any operation would have been impossible. The urgent vomiting seemed to point to cancer elsewhere.

Dr. Meadows inquired how near the tumour was to the peritoneal surface; to which

Dr. Hayes replied that it was within a quarter of an inch.

Dr. Rogers thought that the fact of the patient losing blood, and a fibroid being diagnosed, there was no harm in proposing dilatation or incision. He had frequently applied bromine internally and destroyed malignant growths.

ON THE RELATION BETWEEN CONGESTION OF THE UTERUS AND FLEXION OF THE ORGAN.

By John Williams, M.D. Lond., M.R.C.P.,

ASSISTANT OBSTETRIC PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL, AND PHYSICIAN TO THE OUT-PATIENTS OF QUEEN CHARLOTTE'S LYING-IN HOSPITAL.

Congestion and flexion are conditions which frequently coexist in the uterus. This is a matter of observation on which gynæcologists at the present time are generally agreed. The relation which exists between congestion and

flexion of the womb, however, is a question with regard to which different and even opposing views are held. These views are two:

1. It is held, on the one hand, that congestion is the primary morbid condition of the uterus, and that flexion follows as its consequence.

2. On the other hand, it is maintained that flexion is the primary morbid state, and that congestion is brought about by it.

A third view may be adopted, namely, that the two conditions bear no relation of cause and effect to one another, though they frequently coexist in the same organ.

The question of relationship is one that cannot be settled by direct observation. I believe, however, that we are in possession of sufficient knowledge of the effects of disease on the tissues to decide the point in dispute; and though this indirect method does not always prove as convincing as the direct method of observation, yet, when properly applied, it is equally accurate and certain.

The question is one of the greatest importance, because upon the view adopted will depend the treatment undertaken for the cure of a large number of uterine diseases, and, therefore, we should call to our assistance all the means at our command which are likely to help us to arrive at correct conclusions.

In the consideration of the subject the two first views named demand separate discussion, but the third will not require separate consideration, as the truth or error of it will appear from the discussion of the other two.

In considering the first view—that is, that congestion is the primary morbid condition of the uterus, and that flexion of the organ follows as its consequence—it will be necessary to discuss the causes of congestion of the uterus, the effects of congestion on the uterine tissue, and whether such effects are sufficient to produce flexion of the organ.

Congestion of any organ means an increase in the amount of blood in its vessels, that increase being in excess of its physiological requirements.

Congestion of the uterus is said to be due to parturition and abortion, the hyperæmia of menstruation, adventitious growths in the organ, blood-poisoning, obstruction to the circulation through the heart and lungs or in the ascending cava, or it is said to arise idiopathically, as from cold taken during a menstrual period.

Cases of congestion due to the presence of adventitious growths in the uterus do not help us in solving the question which forms the subject of this paper, for when flexion of the uterus exists in conjunction with adventitious growths and congestion of the organ the displacement is attributed, and I believe rightly, to the neoplasms.

Cases of congestion due to blood-poisoning, obstruction to the circulation through the heart and lungs or ascending cava, help us equally little, because such cases present urgent symptoms, which demand the aid of the physician rather than of the gynæcologist, and, therefore, come but rarely under the observation of the latter.

We need, then, consider only the three remaining causes of uterine congestion, namely, parturition and abortion, menstruation, and cold taken during the menstrual flow.

Parturition and abortion, it is well known, are the chief causes of uterine congestion. They are also very efficient causes of uterine displacement.

Menstruation has been and is still described as a periodical congestion, or secretion, of the uterus, causing hæmorrhage from the mucous surface of the organ. It is also stated that this periodical excess of blood in the organ causes or favours "congestion" and "chronic engorgement." I cannot, however, regard menstruation as a congestion or an erection of the uterus, nor as a symptom of such conditions. If a uterus be examined directly after the menstrual discharge has made its appearance the uterine appendages will be found much congested, the veins of the broad ligaments and ovaries being distended with blood. If a section of the uterus itself be made it will be seen that the muscular portion of the wall is pale, and contains but little blood, while the mucous membrane, which, just before

menstruation has commenced, has attained a thickness of almost half an inch, is almost black from engorgement of its vessels and extravasation of blood into its substance. (I speak of the inner surface of the uterus as its mucous membrane in accordance with views generally adopted; but I regard the uterus, not as an organ possessing a mucous membrane, but as a mucous membrane whose muscular fibre-cells have undergone great development. The data upon which I base this view have in part been published elsewhere.)

The period during which the menstrual discharge flows is the time in which the muscular walls of the uterus contains least blood; from the cessation of one discharge to the onset of the next following there is a continually increasing flow of blood through the uterus. This is due to the fact that the internal walls, during the intermenstrual interval, are rapidly proliferating, growing greatly in thickness, and developing a new mucous membrane. This rapid development requires an increase in the amount of blood flowing through the organ, but this increase should not be regarded as a congestion or an erection. Just before the menstrual discharge appears the mucous membrane undergoes fatty degeneration, then the muscular wall contracts; this contraction drives the blood from the vessels of the muscular portion into those of the mucous membrane and broad ligaments; the result is that the muscular wall becomes pale, the mucous membrane greatly congested, and the vessels of the broad ligaments gorged with blood.

The erectile theory of menstruation, as propounded by M. Rouget, appears to me to be untenable. He maintains that the layer of muscular fibres found under the peritoneum lining the pelvis contracts upon and constricts the veins returning from the uterus and thus causes erection of the organ. He has also found what is termed erectile tissue in the uterine wall. Erection, except in certain rare diseases, is a passing condition, lasting a very short period only, but M. Rouget believes that the uterus remains in a state of erection during the whole period of the menstrual flow, that

is, for four or five days. This state of erection, he says, is due to the contraction of the muscular fibres already named. We know of no such lasting muscular contraction or continuous erection except in disease, and until some proof that the uterus becomes erect (in the sense believed by M. Rouget), and is maintained in that condition during the period through which the flow continues, is forthcoming, the erectile theory of menstruation should not be accepted.

At the same time, that there is an increased quantity of blood in the uterine walls just before menstruation cannot be doubted, and that this renders the organ turgid and in a certain sense erects it I feel assured of, but this increased flow is not determined by muscular action constricting the veins returning from the uterus, but by a physiological growth, which growth is a preparation for the reception of an impregnated ovum.

No one, so far as I am aware, has described the impregnated uterus as being in a state of congestion or of erection, yet the condition of the pregnant uterus is only the natural development under natural conditions of that state which existed just before the menstrual discharge began to flow, just as manhood is the state into which boyhood naturally developes.

It has been said that the periodically increased flow of blood into the uterus favours or causes congestion and chronic engorgement. There are other organs in the body which are subject to such physiologically increased vascularity, for example, the stomach, the liver, and the kidneys, but it has, I believe, never been asserted by physicians or pathologists that such a physiological process favours or causes chronic congestion in the organs named.

Further, if the uterus be an erectile organ in the true sense of the term, which I do not dispute, and if it frequently becomes erect, there is no ground for regarding such a condition as causing chronic congestion. Our knowledge of other organs forbids such an assumption, for we have never heard of chronic engorgement of the

penis or of the nipple having arisen from their frequent erections.

Cold caught during a menstrual flow doubtless causes amenorrhœa and inflammation and congestion of the uterus.

Twelve young women suffering from amenorrhœa have consulted me at University College Hospital during the last eighteen months. Five of these had not menstruated at all or had menstruated once or twice only. Two of these five had menstruated twice, and attributed the arrest of this function to cold taken during the period.

Of the remaining seven cases one appeared to be due to anæmia, one to anteflexion, and one to ovarian disease.

In the remaining four cases menstruation had been regularly established and had afterwards ceased, and the cessation was distinctly attributed to cold.

On examination, however, each one of the four proved to be pregnant. So that out of seven cases in which the menstrual function had been established and then suspended, four were pregnant. I believe, therefore, that cold is not a frequent cause of amenorrhœa and congestion of the uterus.

The first effect of congestion on the uterus is to render it turgid, slightly larger, and heavier, through distension of its vessels. Then, if the condition continues, exudation of serum into the tissue of the organ takes place, and new tissue is produced. At this stage the organ is probably somewhat softer than normal, but this softening is very slight. Subsequently the uterus becomes larger and indurated. These changes cannot be well observed in the body of the uterus, but it is not difficult to make them out in the cervix, and we may fairly infer that the changes due to congestion of the former are similar to those arising from the same condition in the latter. Further, we know that the tendency of the tissue produced by inflammation or congestion is to contract in all directions. This is seen in the vagina after inflammation, in the skin of the legs which has become congested or inflamed over various veins, or in the urethra after a long-continued gleet.

The effect on the uterine cavity would therefere be diminution of its calibre. Frequently, and indeed almost always, however, the os uteri in these cases is larger than natural, and may even admit the tip of the finger. This is due to contraction of the new tissue, causing eversion of the lips; and the canal higher up, though elongated from enlargement of the uterus, is not dilated. I have met with cases of enlarged uteri in which I had some difficulty in introducing the sound through the inner orifice, though some of them had borne several children. It seems to me that in those cases the contraction of the canal was due to the contraction of the new tissue, and not to the contraction of cicatrices, which are rarely or never found so high up.

I have met with uteri presenting the condition described, viz., uteri generally enlarged, having thicker, harder, and tougher walls in women who had borne children or who had aborted, but I have never met with a virgin uterus which presented the above characters, except in those cases where such a condition was complicated by some other morbid state. Cases of uncomplicated enlargement of the virgin uterus due to congestion are said to occur, but they seem to be of rare occurrence, for Dr. Henry Bennett does not mention one such case amongst the 300 cases enumerated at the end of his book, and Dr. Tilt in his work on ovarian and uterine inflammation mentions only fourteen cases of virgin uteri in which chronic metritis existed. Whether these cases were simple or complicated, and whether the condition led to congestion and enlargement of the organ, is not stated.

Flexion or flexion with congestion of the virgin uterus on the other hand is not infrequently met with.

I have endeavoured to determine the increase of the weight of the body and fundus of the uterus when congested, and for this purpose I estimated the volume of an uterus slightly larger than normal by putting it into water and measuring the quantity of water it displaced. I found by this means the volume of the body and fundus to be about six drachms, that of the cervix about four drachms. The

uterus not being a very vascular organ, the amount of blood contained normally in its vessels can hardly amount at any one time to $\frac{1}{3}$ of its volume, that is, to two drachms in the body and fundus and to $1\frac{1}{3}$ drachms in the cervix. If during congestion the amount of blood in the vessels of the organ were doubled (and I consider this a good allowance), we should find in the fundus four drachms, that is, two drachms more than the normal amount. Can this increase in the weight of the fundus produce flexion of such an organ as the uterus? For such a small increase in weight to be capable of producing flexion of the uterus, the walls of the organ must become softened even to a pulp, or the cavity must become greatly enlarged, or the walls must become very thin. These are mechanical conditions which are indispensable for the production of flexion by such a small weight. We have, however, seen that the effects of congestion are at first slight enlargement of the uterus, next slight softening of its tissues, and finally enlargement and induration of the organ. All of these are conditions in which it is impossible for the slight increase in the weight due to congestion of the body and fundus of the uterus to produce a flexion of the organ.

There is another condition of the womb which may help us to decide correctly upon this question—I mean the condition of the impregnated uterus during the first four months of gestation.

We know that the amount of blood flowing through the uterine vessels becomes increased when impregnation has taken place, the uterine walls become thicker and softer, and the whole organ enlarges. The fertilised ovum also enters the uterine cavity, and becomes attached in the great majority of cases to the fundus and to the adjacent part of the anterior or posterior wall, and that it continues to grow in that situation. It is also known that the growth of the ovum up to the fourth month does not keep pace with the growth of the uterus, and that the cavity of the latter is not filled by the ovum until the period named (fourth month), and that up to that time a space exists between the

lower border of the ovum and the internal uterine orifice, which space contains a little mucus only. Here we have a general enlargement of the uterus, a greater amount of blood in its walls than in any case of simple congestion, a softening of the uterine tissue much more marked than occurs in almost any case in the unimpregnated condition, its cavity enlarged and partially unoccupied, except by a little mucus, and to the fundus is attached in addition the growing ovum, and yet flexion rarely or never occurs in the impregnated condition; the cases of flexion of the gravid uterus which have been met with have been thought to be cases in which uteri, already flexed, had become impregnated, and not cases in which flexion was brought about after impregnation.

It seems to me that these facts militate most strongly against the view that congestion is a cause of flexion.

The next view is that flexion is the primary morbid state, and that congestion results from it.

The rarity of simple congestion and the not infrequent occurrence of congestion accompanied with flexion in the virgin uterus seems to favour this view; but in order to arrive at a correct conclusion with reference to this matter, it is necessary to take into consideration the immediate effects of flexion on the uterus. Flexion, then, in the first place, not only bends the canal of the uterus, but it closes it at the point of bending, and thus produces obstruction to the flow of mucus and blood from the cavity of the body of the organ. This is a necessary consequence of the relation of the diameter of the canal to the thickness of the uterine walls.

In the next place, we very commonly find coexisting with flexion in old-standing cases an enlargement of the body of the uterus and a dilatation of its cavity. This can be proved by the finger and sound. Is this latter condition a result of the flexion? In order to decide this question we must have recourse to the pathology of other organs, which, like the uterus, are hollow and possess muscular walls.

The varicose condition of veins is brought about by

pressure on their inner surface, the pressure being due to the weight of a column of blood or to obstruction. This pressure on the inner surface of the vein causes congestion and subsequent thickening of its wall. The new tissue, though tougher, is less elastic than the healthy wall of the vein, and consequently when it is once stretched by pressure of blood it remains stretched, and the vein becomes permanently dilated.

Hypertrophy and dilatation of the stomach is caused by stenosis of the pylorus.

Hypertrophy and dilatation of the intestine is caused by obstruction to the passage of fæces due to stricture.

Hypertrophy and dilatation of the heart is due to obstruction to the flow of blood out of it, or to regurgitation of blood into it. Both have mechanically the same meaning.

Hypertrophy and dilatation of the bladder is due to enlarged prostate and stricture. In many cases of stricture, however, the bladder becomes hypertrophied and contracted —a condition which is due to certain conditions which frequently complicate stricture.

It is a general law that obstruction to the exit of material from hollow muscular organs causes their dilatation and hypertrophy. I think it is fair to apply this law to the uterus.

The discharge from the uterus is very slight, except during the menstrual periods; at that time, however, a considerable but varying quantity has to pass from this cavity to pass out through the vagina. It is said, however, that the increased quantity of blood—the so-called erection or congestion—in the organ during the menstrual period erects it, and therefore straightens the canal and renders it patent. I have already stated that, just before the menstrual flow appears, the vessels of the uterus contain more blood than at any other time, and that this renders the organ more turgid, and, in a certain sense, erects it. But what is the effect of this increased flow of blood through the vessels of the uterus when the organ is flexed? Virchow has shown that at the angle of flexion—that is, in the wall

of the organ next the concavity—the tissue becomes fibrous, stringy, and wasted ; the vessels at that point are therefore small, insignificant, and more or less occluded. I am speaking now not of slight curvatures of the uterus, but of acute flexions. In the former I doubt not that the increased vascularity just before the menstrual period straightens the canal, but in the latter condition it has an opposite effect. This question has not been, and probably cannot be, determined by direct observation ; but there is an analogous condition in the penis which illustrates this point, and, it seems to me, it throws some light upon it—I mean chordee. Chordee is due to obstruction to the flow of blood through the vessels of the corpus spongiosum caused by muscular spasm or inflammatory exudation, and the consequence is that during erection the penis is bent downwards. This condition, in as far as regards the downward bend of the penis, is, I believe, similar to the condition found at the point of flexion in the uterus, and, if such be the case, the increased vascularity of the uterus during menstruation, instead of straightening the organ, increases the bend in it ; so that, instead of removing the obstruction, it increases it. The symptoms observed in cases of flexion of the uterus support this view. The swelling of the uterus is at its height a little before the discharge appears. The woman suffers considerable pain, the uterine cavity becomes filled with blood, suddenly the pain becomes intense and altered in character, a gush of blood comes away, and the woman is relieved ; by-and-by another gush, and the discharge comes away continuously, and the woman remains free from pain.

The explanation of these symptoms seems to be the following. The uterine walls contain a larger quantity of blood than usual—blood is poured into the uterine cavity until it is more or less distended. This causes pain. After a time the uterus contracts, and then the patient suffers a paroxysm of intense pain, the contraction of the uterine walls drives the blood out of its vessels ; the organ becomes by this means less bent, and the canal consequently less occluded, a gush of blood passes through the inner orifice,

and the woman is relieved of her intense suffering. The same process is repeated until the walls of the organ contain less blood, then the uterus becomes straighter, the canal less occluded, and the flow becomes continuous and painless.

The obstruction then, instead of being diminished by the so-called menstrual hyperæmia, is, on the contrary, increased by it. This causes distension of the uterine cavity and congestion of its walls, and in process of time hypertrophy of all the uterine tissues.

Dr. Graily Hewitt in the last edition of his work on 'Diseases of Women' attributes the congestion which accompanies flexion of the uterus to strangulation of the organ. How far this condition affects the body and fundus of the uterus I am not prepared to state, but that it markedly affects the cervix, I think, is certain. In flexion the plexuses of veins around the junction of the vagina with the uterus become compressed—those on the concave surface more so than those on the convex surface. As a consequence of this the lip of the uterus, corresponding to the concavity of the flexion in old-standing cases, is more congested, larger, and longer than the other lip. For instance, in old-standing anteflexion the anterior lip is larger, longer, and harder than the posterior. It seems to me that this can only be explained by the condition to which Dr. Hewitt has given the name strangulation.

Besides the above causes of congestion of the flexed uterus there is a third, which I suggested in a paper published in the 'Lancet' some months ago. It operates in cases of retroflexion only, and greater enlargement of the uterus occurs in this form of displacement than in any other. The cause is constriction of the body of the uterus and of the returning veins in the ligamenta lata by the sacro-uterine ligaments. In many cases of retroflexion the fundus of the uterus is as low down as the cervix, and, consequently, it must be in the pouch of Douglas. In such cases the fundus of the uterine has passed down between the sacro-uterine ligaments, and has drawn with it a trian-

gular portion of the broad ligament on each side. The body of the uterus and the veins of the broad ligaments became in this manner constricted by the stretched upper margin of Douglas's pouch, that is, by the sacro-uterine ligaments.

I have on several occasions failed in my endeavour to elevate the fundus of the retroflexed uterus by the uterine sound, and by the finger introduced into the vagina, but have afterwards succeeded by the finger introduced into the rectum. When the fundus had been raised the finger in the vagina could easily distinguish the ligamenta sacro-uterina like a couple of strings running backwards from the cervix of the uterus. I had no ocular proof, however, of the constricting action of these ligaments, until Dr. Squarey kindly brought me an uterus which was slightly retroflexed. Posteriorly along the sides of the body of this uterus were distinctly seen the marks of these ligaments. The flexion was but slight, and no part of the broad ligaments had been drawn within the grasp of the constricting bands, yet the mark of the bands on the body of the uterus unmistakably pointed out their constricting action.

Summary.—Enumeration of the causes of congestion of the uterus.

There is no evidence to show that a physiologically increased flow of blood through the uterus occurring periodically, or that erections of the uterus, favour or cause chronic congestion of the organ.

Exposure to cold during a menstrual period is not a common cause of congestion of the uterus.

Simple congestion is a rare affection of the virgin uterus.

Flexion, or flexion accompanied by congestion, is not an uncommon affection of the organ in its virgin state.

The effects of congestion on the uterus are, at first, slight enlargement through distension of its vessels, then slight softening from exudation into its tissue, and lastly, enlargement of the organ and induration of its tissue.

The increase in weight of the virgin uterus arising

directly from congestion is, probably, equal to about the weight of two drachms of blood.

The effects of congestion on the uterus are such that it is not possible for such a small force as the weight of two drachms of blood to produce flexion of the organ.

The condition of the uterus from the time of impregnation to the fourth month of gestation militates strongly against the view that congestion is a cause of flexion.

The effects of flexion on the uterus are :—

Occlusion of its canal, leading to dilatation of its cavity, and congestion and thickening of its walls, just as obstruction to the exit of material from all hollow muscular organs causes dilatation and hypertrophy of those organs.

The increased flow of blood through the flexed uterus just before menstruation does not diminish, but increase the flexion.

Simple flexion of the uterus gives rise to congestion and hypertrophy of the cervix by compressing the venous plexus around the insertion of the vagina into the uterus.

In retroflexion, the body of the uterus and the veins of the broad ligaments may be grasped by the sacro-uterine ligaments, and thus become greatly congested.

Dr. TILT thought the author had well explained the mechanism of uterine congestion by flexion of the womb, but he maintained that something more than flexion, some diseased condition of the uterine tissues, was required to account for uterine congestion and its frequent consequences; otherwise it would not so frequently occur that the cure of the uterine disease permitted patients to take an active part in all social duties, although the womb remained considerably retroflected. Dr. Tilt still believed with Roger that normal menstruation congested the womb, and stated that many cases had been recorded in which the whole structure of a menstruating uterus had been found gorged with blood, as in Dr. Hayes's case. Dr. Tilt argued that in many cases of uterine disease menstrual molimen was seldom absent, and that there ensues a considerable amount of permanent softening of the body of the womb, while the cervix retains its usual final consistency. Under such circumstances it is easy to understand that some internal pressure should bend the overweighted body of the womb on its neck; and he argued that the frequent disap-

pearance of marked uterine flexion after the cure of uterine congestion and ulceration, by leeches, cooling injections, and caustic treatment, showed these morbid conditions to have been the real cause of the flexion. Dr. Tilt considered that nothing could be more dangerous to sound practice than to attach too much importance to flexion of the uterus as a factor of disease; that to accept it as the common cause of uterine congestion was actually to make it the keystone of uterine pathology, and that the inevitable result would be the general resort to pessaries in the earliest stages of uterine affections, and to their almost necessary aggravation thereby; and he concluded by strongly urging that whatever else was amiss about the womb, beside its state of flexion, should be cured by preliminary treatment, before resorting to mechanical measures.

Dr. Barnes demurred to the statement that the profession was divided into two camps, in one the flexion, and in the other congestion preceding. The tendency was to receive one idea and to be satisfied by it, the mind not being able to receive both. No doubt inflammatory conditions arose after labour from enlargement and subinvolution and flexion or version ensued. As to flexion preceding congestion, the former existed in the virgin state before any physiological changes had taken place in the uterus. The flexion might favour congestion, but numerous cases of dysmenorrhœa could not fairly be put down to one or the other condition, the congestion being often due to constriction of the lower part of the cervix. The paper was a clear and well reasoned-out statement.

Dr. Bantock thought there was one point that had been missed—the effect of cold in repressing the catamenia; he had seen numerous cases where severe consequences had ensued from this cause.

Dr. Braxton Hicks remarked that flexion persisting and congestion then occurring the latter was kept up by the flexion. Flexion itself was common and yet there were no symptoms, therefore we could not look upon flexion as producing congestion; but where flexion existed and congestion occurred, then there were all the symptoms described. Congestion was relieved entirely by replacing and supporting the uterus.

Dr. Playfair said that there were cases where congestion existed, but it was impossible to treat the flexion, but by relieving the congestion (by leeching, &c.) the flexion disappeared. He agreed with Dr. Williams that in the vast majority of cases pessaries were necessary. As regarded mechanical treatment he thought more highly of it than formerly, since perusing Dr. Graily Hewitt's work. It was true that the introduction of the uterine sound often produced inflammatory mischief if used incautiously.

Dr. Braxton Hicks remarked that the employment of the

uterine sound for redressing the retroflexed uterus was unnecessary; the postural treatment and the pessary being all that was required.

Dr. Wynn Williams said that flexion might precede congestion and cause it, while in other cases the congestion caused the flexion. He had grave doubts if any severe flexion could be removed by treatment.

Dr. Gervis said that cases were frequently met with where flexion and congestion existed together; the latter was relieved by nitrate of silver, &c., applied to the interior of the uterus, and the version passed away without the employment of a pessary. In cases of sterility it was not at all infrequent to find the catamenia regular and no uterine disturbance whatever, and yet flexion existed.

Dr. Wynn Williams stated that he did not allude to versions, only flexions.

Dr. Hayes stated that in cases of menstruation the whole uterine organ did not undergo congestion. In the mid period congestion occurred when the mucous membrane was being formed. It was a question whether the menstrual nisus caused sufficient congestion to lead to flexion. It often happened that the patient had a larger discharge than usual at the menstrual period, and was suddenly seized with violent pain, which passed off; at the next period the pain returned, and on examination the uterus would be found to be enlarged and partially fixed. This would be ascribed to hæmatocele, but it might be pelvic cellulitis. In cases of prolapsus with retroflexion there were hypertrophy of the neck and elongation.

Dr. John Williams replied that when the uterus became displaced after labour, certain very important conditions—as elongation of the uterine cavity, and great enlargement of the uterus itself—had arisen, in consequence of which the fundus projected out of the pelvic into the abdominal cavity. In this manner the force of the acting diaphragm came to strike the uterus on its posterior surface and to produce anteflexion. Retroflexion of the uterus occurring after labour was caused by slight exertion, as getting out of bed, &c. In this case the abdominal walls were put in action, the fundus of the enlarged uterus was driven under the sacral promontory, and the organ, on account of its size, became fixed in that position. Permanent retroflexion was the consequence. I do not dispute the fact that exposure to cold during the menstrual flow does cause congestion of the uterus; but, according to my experience, it is not of common occurrence. That there is a third factor between flexion and congestion I have no doubt. In cases of retroflexion that factor is the constriction caused by the retro-uterine ligaments; in other cases it is the constriction of the uterine canal at the point of flexion. The menstruating uterus referred to by Dr. Hayes was, I believe, taken from the

body of a woman who died of "acute blood-poisoning," so the appearance seen in it should not be taken as those usually seen in the menstruating uterus, because the organs of persons who die from acute blood-poisoning are generally in a state of congestion. That there are congestions of the uterus other than those caused by flexions I readily admit. The object of the paper was to show the relation that may exist between the two conditions, and not to show that flexion was the only cause of congestion of the womb. At the same time I do not consider uteri which remain enlarged after labour to be congested, but to be in a state of hypertrophy. The womb became enlarged for a certain purpose, that purpose was fulfilled when the labour was over; involution did not take place to the usual degree, and the womb remained in a state of hypertrophy. But in considering the relation between congestion and flexion of the womb, I think we should study the subject in the virgin uterus, and in such I have never met with, nor have I found recorded, simple congestion; on the other hand, I have not infrequently met with flexion of the virgin uterus, with and without congestion.

A CASE OF ILEO-CÆCAL INTUSSUSCEPTION IN AN INFANT OF EIGHT MONTHS.

By Henry M. Madge, M.D.

On the 16th of March, 1874, I was called to see a little girl aged 8 months, who, the mother told me, had been ill several days with sickness and a slight tendency to diarrhœa. There was nothing particular to attract attention on my first visit. The child was plump and well nourished, took the breast well, and did not appear to be in much pain. In fact, it appeared like an ordinary case of stomach derangement. On the following day there was a little blood with the stools, and the latter were accompanied with more straining than usual. I made a careful abdominal examination, but could detect nothing wrong, and continued the soothing treatment I had commenced with. The child was not seen on the 18th, but there were no

stools and no blood passed on that day. On the 19th there were no stools, but a copious discharge per rectum of pure blood accompanied with much straining. During the straining the mother told me she saw something protrude externally. I passed my finger high up in the rectum, but could not feel any swelling or protrusion, nor could I make out anything very definite by again examining the abdomen, and although it was fuller and more tender than before, there was no distinct swelling or tumour. It should be stated, however. that the abdominal walls were thick. The blood continued to pass so freely and the child was getting so weak that I injected cold water with the view of checking it, which it appeared to do for a few hours. Feeling now certain that I was dealing with a case of intussusception, I tried inflation, and then the injection of tepid water; but both gave so much pain that I was obliged to desist. I then sent for a medical friend with the intention of trying the same methods under chloroform, but before this could be carried out the child rather unexpectedly died.

On making a post-mortem examination I found that a portion of the ileum with a great deal of the large intestine had become completely invaginated in the remaining portion of the canal. The ileo-cæcal valve, with the appendix vermiformis, was found at the extremity of the protrusion, which was as low down as the lower part of the sigmoid flexure, so placed, indeed, that it seemed to me quite possible that during the straining efforts it might have shown itself externally. The rounded extremity of the inverted bowel was dark with congestion, and its surface appeared to have two or three abrasions, as if the coats had given way. This was, no doubt, the source of the bleeding observed during life. The bowel was easily drawn out of its unnatural position, there being no adhesions, and the thickened and congested condition of the parts gradually shaded away above into a pale and natural appearance. About the other post-mortem appearances there is nothing particular to remark. I have brought the case before the Society partly on account of its rarity and partly because a notice of the

general features of an affection, dangerous and difficult to cope with, might be useful. In a case like this it is easy to be "wise after the event." An earlier recognition of the real nature of the illness might possibly have led to a happier result, but the diagnosis of intussusception is not always easy. The passage of pure blood which, as a good practical point to be remembered, should always make us think of invagination of the bowel, does not usually take place until that condition has been of some duration, and the other symptoms which are stated as being diagnostic are common to many other affections.

It seems scarcely likely with such an extensive invagination that inflation, even under chloroform, would have been sufficient to unravel it. Several successful cases, however, treated by this method are on record. Mr. Spencer Wells, I believe, performed gastrotomy in one case and with success.

The mother of my little patient thought that the cause of the mischief had been an excessive amount of tossing and romping to which the child had been subjected. She particularly mentioned as a possible cause that some of the elder children had been in the habit, in play, of butting their heads against the child's belly—a rough and unscientific opinion, perhaps, but as authors on the subject mention, among other causes, kicks and blows on the abdomen, there may possibly be some truth in it.

Dr. PLAYFAIR referred to a case in which there was a distinct loss of blood per anum. Gastrotomy was proposed, but one or two eminent surgeons declined to sanction the operation. The tumour increased, and the patient died. Had an operation been performed at first, the invagination might, no doubt, have been removed.

Dr. BRUNTON had seen several cases in which the tumour was very manifest, a knot of bowel being detected in the neighbourhood of the umbilicus. Injection of air and also water had been tried unsuccessfully. Tincture of opium in drop doses often proved of great service.

Dr. HAYES agreed with Dr. Playfair in the advantage of an operation.

Dr. Gervis cited one case where ice had been applied. The tumour disappeared, and the child recovered.

Dr. Rasch alluded to the case of a watchman at Vienna who passed several feet of intestine per anum and recovered.

Dr. Wynn Williams referred to several cases published in the 'Medico-Chirurgical Transactions.'

NOVEMBER 4TH, 1874.

EDWARD JOHN TILT, M.D., President, in the Chair.

Present—38 Fellows and six visitors.

Books were presented by Dr. L. D. Bulkley, Dr. G. J. Engelmann, Dr. W. Goodell, Dr. Gaillard Thomas, and from the Clinical and Royal Medical and Chirurgical Societies.

A copy of the medical works of Dr. Thomas Willis printed in 1681, folio, was presented by Mr. T. Taylor, of Birmingham.

Mr. James Henry Clark (Jamaica) and Mr. Wm. Henry Roots (Kingston-on-Thames) were declared admitted as Fellows of the Society.

The following gentlemen were elected Fellows:—Edward Barber, L.S.A. (Sheffield), John Barclay, M.D. (Banff), Wm. Thomas Greene, M.A., F. John Hannan, M.B. (Woking), Dean Longrigg, M.R.C.S. (Penge), Wm. Hele Payne, M.R.C.S. (Peckham), Albert John Venn, M.B., Harry Wells, M.D. (Entre Rios), and David Young, M.D. (Florence).

Dr. C. R. Brown and Dr. William Rees were proposed for election.

Mr. CHURTON related the particulars of a case of recto-

vaginal fistula caused by a Zwanke's pessary retained for nearly two years.

A woman, æt. 60, was supplied with a Zwanke's pessary for a prolapse of the uterus. A paper relating to the management of ordinary trusses for abdominal hernia was given to her at the Institution where she obtained the pessary, without other or verbal directions, together with a letter of thanks. She therefore did not think it requisite ever to remove the pessary. In about nine months she noticed an offensive discharge from the vagina. This increased, and continued for a whole year. Then fæces began to come through with the discharge. After enduring this state of things for three weeks from fear of examination, she applied for advice, but without mentioning the pessary, the end of which was found protruding from the vulva. After its removal a rent large enough easily to admit two fingers was found leading into the rectum. In two months this had so far closed as not to admit the tip of the forefinger. Operative interference was therefore deferred. The patient's health, which had suffered greatly from the very time of the introduction of the instrument, was quite restored, her only trouble being the involuntary escape of gas and of small pieces of fæcal matter through the orifice.

Dr. Routh said that the case just cited showed how necessary it was to know how long such instruments should be retained. The time was nowhere laid down in obstetrical works. He had met himself an instance where a globular pessary was retained for five years, and then had to be removed with forceps. He had known also of two cases in which Hodge's pessaries produced fistulæ. His rule was to keep them in for three months at the utmost, and then remove them for a few days before reintroduction; but usually he preferred six weeks.

Dr. Rogers said that no matter how judiciously rules might be laid down in books for guidance of medical men using pessaries, they would not be observed by patients, partly from forgetfulness or misapprehension of the advice given, partly from nervousness and dislike to be frequently examined, especially when feeling pretty comfortable while wearing the instrument. Dr. Rogers felt sure no medical man would place an instrument in the vagina

without laying down directions, and giving the patient the necessary advice for her guidance, which Dr. Rogers found so frequently unattended to. Dr. Rogers had on one occasion removed one of the old boxwood pessaries placed within the patient twenty years before by the President; the operation cost him much trouble ere she was delivered of it. She acknowledged she had been told to show herself at the dispensary from time to time, but had never done so until severe suffering forced her to apply at the Samaritan Hospital. Dr. Rogers had been obliged to perform surgical operations to remove both Hodge's and Zwank's, which, having ulcerated through the mucous membrane, had become impacted in the vaginal walls, or had entered into the contiguous organs, and thus he had operated on vesico-vaginal and recto-vaginal fistulæ made by both kinds of pessaries, all doubtless occurring from neglect of the rules laid down for the patient's guidance. Dr. Rogers thought the Zwank, though a dangerous, still, in some cases, a most useful instrument if removed every night, and its wearing should be discontinued for a week or more when irritation has been induced by it.

Dr. Cleveland thought, as it was improbable that a pessary would suddenly make its way through the vaginal wall into the rectum or bladder, the best rule of practice would be to direct the wearer of an instrument to present herself as soon as she experienced any unusual irritation or pain therefrom.

Dr. Hope remarked that the case brought before the Society was very similar to one that came under his notice within the last three weeks. It was that of an old woman who applied at the out-patient room of St. Bartholomew's Hospital, stating that she had suffered from "falling of the womb" for some years, for which she had worn an instrument, which, however, had been removed a short time previously by a medical man in her neighbourhood. The pessary was one of Zwank's, and very much like what is being passed round the room just now. She had worn it continuously for fourteen months. She said that lately she had been quite unable to retain her water. Upon making a vaginal examination he found a considerable rent in the anterior wall of the vagina communicating with the bladder, and through which the urine flowed freely. The posterior wall of the vagina was also much corrugated. Wishing to examine this patient more carefully, he requested her to come to the hospital the following Thursday. The patient, however, had such a dread of surgical interference that she did not make her appearance.

Dr. Brunton said that the cases related by the various speakers were so interesting they ought to be put on record. He had no personal experience of such; but he recollected that a medical friend of his, on being called to attend a primiparous woman in her labour, found an unusual obstruction to his examination, which he removed, and found it to be a Hodge's pessary which

had been applied many months before, by whom he did not ascertain.

Dr. Edis alluded to a case where he had extracted, with considerable difficulty, a large ball pessary from a patient who had worn it for eleven years, the whole of the vagina being in a state of granular ulceration. In several other instances he had removed instruments embedded in the vaginal walls that had caused more or less inconvenience.

Dr. Tilt thought these cases should be noted in the 'Transactions' as a warning to others.

Dr. Wiltshire mentioned a case which came under his care at St. Mary's Hospital, in which a Zwanck's pessary caused fistulous openings into both the bladder and the rectum. He thought that if a rule were laid down it should not depend on time, but on the supervention of symptoms of discomfort, discharge, &c. He regarded gouty women as very intolerant of pessaries, incrustations rapidly ensuing in such persons. He thought every patient should have clear instructions given to her respecting these instruments, and that Zwanck's pessaries might produce dangerous symptoms.

Dr. Gervis feared that Dr. Wiltshire's suggestion would not prevent all risk, as on more occasions than one he had removed a Hodge's pessary on finding ulceration of the vagina present, corresponding with one or other of its bars, and yet the patient not conscious of any inconvenience, and complaining only of some leucorrhœal discharge.

Dr. Palfrey remarked that there was often great trouble without many symptoms. In one case, eighteen months after the introduction of a pessary, there was a sudden gush of urine, from the pessary having forced its way into the bladder. The patient denied all previous symptoms. He made it a rule with hospital patients to have them removed once a month by the nurse, who then employed the douche, and if no harm had resulted the clerk reinserted the pessary. He considered the old-fashioned Hodge very bad, Dr. Greenhalgh's modification being a great improvement. He regarded Zwanck's pessary as very dangerous.

Dr. Hayes referred to a case he had brought before the Society where a Hodge had become embedded in the vaginal wall.

Dr. Charles Carter showed a fœtus and gave the following account. A young woman, æt. 26, was married on May 3rd, 1874, and was delivered of a fœtus on October 22nd, 1874, 172 days or twenty-four weeks and four days after marriage. She was regular till marriage and was

unwell three days before that event. She had a coloured discharge for one day at the usual time in the month following. She supposed she was about 4½ months pregnant and said she had never felt any fœtal movements. The fœtus cried loudly several times, passed meconium of a greenish-black colour, and urine whilst being washed, and lived for twenty-one hours; it was given a little milk and water. It weighed 1 lb. 6 oz., length twelve inches, of a dark red colour, with abundant hair on the head and down on the cheeks. The nails were well formed on the fingers, reaching almost to the ends. The eyelids were agglutinated together; on tearing them open the papillary membrane was distinctly seen. The right lung was perfectly expanded, but only the upper lobe of the left. The testes were lying midway between the kidneys and the internal rings. There was a centre of ossification in the os calcis, but none in the astragalus. There was a centre of ossification in the first three pieces of the sternum. This fœtus was not more than six months old, if so far advanced.

Dr. Routh thought it was important that the case should be carefully investigated. Two points of importance seemed to have been omitted in the account—viz. the commissures of the brain and the valvulæ conniventes.

Dr. Brodie mentioned that he had lately met with a similar case. A lady was confined at the end of six months and a week. The fœtus was living, and cried well. It swallowed with a little difficulty, and lived five hours.

Dr. Wiltshire also mentioned a case of twins at the fifth month, where one lived three or four hours, the other twenty-four hours.

Dr. Cleveland hoped that every means would be taken to ascertain the precise date of conception, as the main interest of the communication depended upon that point. Certainly the date of marriage, although of great value, was not always to be relied upon as preceding that of conception.

Dr. Barnes stated that in these cases we did not find the lungs completely expanded. As to the reputed age, he remembered an anecdote of the elder Rigby, who said that he had often met with instances of well-developed children born within seven months of marriage, but only with the first.

THE STRUCTURE OF THE DECIDUA.

By Dr. Hoggan.

The structure of the decidua and formation of endothelium on the interior of a cyst-wall in cystic degeneration of the ovum, or rather chorion, was demonstrated by Dr. George Hoggan by means of several microscopical specimens prepared from a case of miscarriage at the end of the sixth week, with an explanation offered on them. The decidua caducà was clearly demonstrated under the microscope to have no connection with any hypertrophy of the uterine mucous membrane (if such exist), but that it was really a typical specimen of embryonic tissue formed probably by exudation, and at this stage of growth the embryonic cells, embedded in intercellular substance, had scarcely begun to differentiate themselves into the future tissue; enough progress had, however, been made in the cells forming themselves into rows, &c., as to show development to be proceeding.

The cystic degenerated ovum was of the size of a hazel nut, covered with villi, and embedded in decidua, which were destroyed in dissecting it out. The cyst-wall was treated with silver, but nothing but fluid was found inside.

Endothelium was seen in different stages of growth, which seemed most active where the largest villi formed a sort of pedicle for the cyst; in the same field of the microscope could be seen the separate embryonic cells on dark ground substance, passing by growth and junction into the so-called lymphatic lacunæ, and these again passing by vacuoles, &c., into the regularly shaped endothelium-cells lining the cyst-wall. The first query was, how had the ovum managed to evolve itself and membranes to such a point without proceeding further? Was this a case of paucity of spermatozoa or absence of Balbiani's vesicle that had so limited evolution?

Again, whence came the embryonic cells that formed the endothelium? Did they pass as "Wanderzellen" from the parent organism, or were these the embryonic cells resulting from the yelk change which had passed on to the wall to form endothelium and villi instead of forming the embryo? While the cyst lining was formed principally of lymphatic lacunæ (or serous secreting surface) no stomatal apparatus could be seen like that on the peritoneum, pleura, &c., thus indicating the difference between serous sacs and serous cysts.

The latter secrete much fluid, but cannot drain it off through stomata, so the cyst becomes distended and grows by its distension, while sacs like the peritoneum, &c., drain off all excess of fluid easily through stomata into lymphatic vessels.

Should those stomata become occluded by hypertrophy of cell growth, as Klein has shown in peritonitis, we have distension occurring, the sac being thus converted into an enormous cyst.

These ideas, however, were merely hypotheses submitted for the opinion of the Society.

In answer to Dr. Madge the villi were stated to be quite healthy.

Dr. Heywood Smith exhibited two new pairs of forceps to aid in the removal of growths, &c., from the uterus, or to be used as vulsella during ovariotomy. From the arrangement of the teeth he called them for distinction "rat-trap" forceps.

1. One form was made with a small ring at the end; this presented, when closed, only a smooth surface, so that if it slipped during an operation it was not liable to injure the fingers of the operator, and from the construction of the

opposing surfaces it was almost impossible that any tissue should slip from its grasp.

2. The other pair were constructed specially for the removal from the uterus or vagina of large fibroid tumours or polypi after they had been detached. They were made in two parts (as midwifery forceps), and when in position could be locked. The fenestræ of the blades measured 2 in. by 1½, and the handles terminated in simple rings. The inner surface of the blades was armed with teeth pointing towards the handles (as the other pair), rendering their introduction easy and their slipping difficult.

Dr. Meadows thought the forceps were likely to be of great use. On two or three occasions he had been obliged to leave the tumour in utero after detaching it, as he could not extract it for want of suitable forceps, the cervix not being sufficiently patulous to allow of digital manipulation.

Dr. Palfrey confirmed Dr. Meadows's experience. In a recent case of a large fibroid, a firm hold by Dr. Marion Sims's new hook was obtained, but all attempts to withdraw the tumour were vain, and at last Dr. Barnes's long forceps were employed. There was one defect in Dr. Smith's forceps—they did not lock in the handle.

Dr. Wiltshire asked why, in such cases as Dr. Palfrey and Dr. Meadows alluded to—those in which removal of an already separated fibroid was impossible on account of its large size—the tumour could not be cut up into small sections by means of the wire écraseur.

Dr. Gervis stated that he had on several occasions adopted the plan referred to by Dr. Wiltshire, and with complete success. Finding, after severing fibroids from their attachment, that they were too bulky to be drawn through the cervix or the vulva, as the case might be, he had divided them transversely with Weiss's écraseur, and found their removal then sufficiently easy. He could recommend this plan as preferable to such prolonged traction with forceps as spoken of by Dr. Palfrey.

Dr. Alfred Meadows exhibited a specimen of the membrane passed in a case of so-called membranous dysmenorrhœa. Remarking upon the intractable character of these cases, he invited the opinions of the Fellows of the Society on their pathology and treatment.

Dr. Aveling believed the membrane exhibited was the nidal decidua, or lining of the uterus, which is periodically shed, increased in thickness and toughness by hyperæmia of the organ. He had ventured to call this hypernidation. Mercury had been found to prevent this abnormal condition during the time of its administration. The rational remedies were those which reduced the supply of blood to the uterus.

Dr. Hayes inquired what appearances were presented under the microscope.

Dr. Williams inquired whether any trace of glandular tissue had been noticed; he had examined several and found it present. Fatty degeneration of the lining membrane took place before the catamenial period; the tissues around were injected, but the uterus was not enlarged. Though mucous shreds were passed, the condition was due to an altered nutrition of the uterus itself; it was not congestion, but was analogous to some skin eruptions, and was not the product of inflammation. Chlorate of potass had been tried, points of this substance having been left in the uterus, which cured it for the time.

Dr. Madge remarked that Dr. Williams spoke of the mucous membrane lying loose. He would ask what was the condition of the wall beneath.

Dr. Williams replied that it was the same as in the uterus when menstruation had nearly ceased.

Dr. Barnes thought there was no naked-eye evidence of glandular tissue. A lady medical student had brought him a specimen she had passed herself, remarking that she had read they only occurred where sexual intercourse had taken place; this had not happened in her case. He thought the membrane occurred in consequence of hyperæmia, apart from gestation. The mucous membrane was not necessarily shed.

Dr. Hoggan remarked it was easy to prepare a specimen, and let the Fellows see for themselves whether it was an exudation or not.

Dr. Hayes inquired whether there were any traces of the Fallopian tubes in the moulds of the uterine cavity that Dr. Meadows spoke of.

Dr. Gervis could recollect no case of membranous dysmenorrhœa in which extreme uterine congestion was not an attendant and probably antecedent condition, and the treatment that he had found to succeed the best strengthened this view. They were generally very tedious cases, but he had found local depletion by scarification and the internal use of the bichloride of mercury together very frequently effect a cure.

Dr. Rasch alluded to a case where a complete cast of the uterus had been passed.

Dr. Brunton suggested that there might be an element of

syphilis in these cases, as several Fellows had stated that the treatment which gave best results was mercury in some form.

Dr. Heywood Smith inquired if Dr. Meadows had employed the intra-uterine application of hyd. pernit.

Dr. Tilt stated that some years ago he had published some cases of this disorder. There was one point to which sufficient attention had not been paid—independently of the body of the uterus being the source of the disease, the irritation and congestive state of the cervix was due to the irritation set up by the attempt to pass the membrane. In one case it was followed by acute inflammation. In regard to treatment, he had injected tincture of iodine in several cases, in two successfully. It was an important point to bear in mind the congestion of the uterus. As for Dr. Brunton's suggestion, he had never heard it mentioned before, and did not believe it.

Dr. Meadows, in reply, expressed his dissent from the view that these cases are due merely to an active state of uterine hyperæmia; he did not dispute that this condition existed in most, if not in all, of these cases, but there must be something more than this, for uterine hyperæmia was a very common condition, whereas membranous dysmenorrhœa was a comparatively rare disease. He believed it was essentially a constitutional affection, not a merely local disorder. In regard to the therapeutics, he knew of no certain remedy; all those which had been mentioned, and many more, he had tried in the present case without the slightest success. Iodine, mercury, cod-liver oil, local depletion, and other local remedies, had signally failed. He believed that many of these cases were practically incurable. Dr. Williams and Dr. Aveling were requested to report further on the case.

CASES OF RETROVERSION OF THE GRAVID UTERUS.

By Henry Gervis, M.D. Lond., F.R.C.P.,

ASSISTANT OBSTETRIC PHYSICIAN TO ST. THOMAS'S HOSPITAL; PHYSICIAN TO THE ROYAL MATERNITY CHARITY.

At the meeting of the Society in July Dr. Chambers brought forward an interesting account of a fatal case of retroversion of the gravid uterus which had occurred in his practice at the Chelsea Hospital.

Having seen something of two other fatal cases this year, and of a third which only just escaped being fatal, I venture to bring before the Society such particulars of them as I have been able to collect, partly on account of the intrinsic interest of the subject, and partly to elicit the opinion of the Fellows on one or two points in the treatment of these cases, on which, so far as I can judge from the published report of the meeting, no discussion took place in July. I only regret that as the cases I saw occurred in consultation practice the account I have of them is somewhat scanty.

In February of this year I was asked by a medical man to see a woman said to be suffering from difficulty in micturition, and to be very ill.

She was 36 years of age, had had several children, and believed herself now to be about four months pregnant. She had kept her bed for some days, complaining of an increasing pain in the lower abdomen and an entire inability to pass water; she was frequently sick and extremely prostrate. When I saw her she was much emaciated, and this symptom, I may notice, was a very marked one in each of the three cases to which I have to refer.

Her skin was dry, her tongue dry and red, and her pulse small and rapid. She told me that the difficulty with her water had first occurred about twelve days previously, coming on after a long walk in which she had carried a largish parcel.

Up to three or four days before I saw her she had passed a little water at times, since then none, and her medical attendant being unable to empty her bladder with the catheter, had expressed a wish that I should see her with him. I found, on examination, the ordinary symptoms of retroversion present, the bladder distended to above the umbilicus, and the lower abdomen very tender to the touch. After very considerable trouble I emptied the bladder, the difficulty apparently arising from the catheter getting continually clogged with shreds of disintegrating mucous membrane and offensive pasty matter. The water itself was scarcely to be recognised as such. It was dark brown,

thickish, and very offensive. I then placed her in the knee-elbow position, supported on either side by her medical man and the nurse, and in assuming it she was able to give herself more help than I had expected. Her intellect, indeed, was quite clear to the last. Sustained pressure on the fundus through the vagina, and aided by two fingers in the rectum, failing after some effort to effect the reposition of the uterus, I hooked the forefinger of my right hand in the os, which I found open to the size of half a crown, and then by drawing it gently down, keeping at the same time pressure as before on the fundus, the uterus soon regained its right position. At the moment of accomplishing its replacement the fœtal membranes ruptured and the liquor amnii escaped. She expressed herself as sensible of a very considerable relief when she had resumed her usual pesition in bed; but from the serious amount of mischief that had taken place in her bladder, and from her general prostration, I entertained no hope of her recovery. My visit was at about four in the afternoon; she miscarried a few hours afterwards, and died on the following day.

The second case occurred in connection with the St. Thomas's Maternity Charity. On the afternoon of the 24th of May I was sent for by the resident accoucheur to see a patient to whom he had been summoned shortly before, and whom he found suffering from retroversion of the gravid uterus. She was 33 years of age, and expecting to be confined in August of her fifth child. A fortnight previously, after a long walk, during which she had been carrying one of her children in her arms, she found herself unable to pass water, and obtained medical attendance. Since then the water had constantly been dribbling away. She had also great difficulty in getting any relief from the bowels, and her medical man had given her much aperient medicine; but finding that she was daily getting worse, he advised that she should apply for help from the hospital.

The resident accoucheur thus reported her condition:—"4 p.m.—Skin harsh and dry; sordes on lips; patient in great pain and much exhausted. Fundus uteri felt just

inside the vagina and completely blocking the rectum. Os reached with great difficulty, being high above the pubes. The bladder reached to much above the umbilicus." After emptying the bladder, which contained upwards of six pints of extremely offensive bloody urine, of the colour of porter, I put the patient, well supported, in the knee-elbow position, and in the same manner as in the last case replaced the uterus. Nourishment, stimulants, opium, and appropriate local treatment, including the use of the catheter every four hours, failed to do more than mitigate her suffering, and early on the following morning she died. The urine was offensive and bloody to the last. Her mind continued clear.

The third case came under my notice in July. I was asked by a medical man to see a case to which he had been called the previous day, and in which he had diagnosed retroversion of the uterus as having occurred. The patient was 36, had been married six months, and believed herself to be about four and a half months pregnant. Three weeks previously, after exerting herself a good deal in opening a window, she found she had a difficulty in passing her water and in getting her bowels relieved. She sent for a medical man, who gave her diuretics and purgatives, and attributed her symptoms to piles. He made no examination. As she continued to get worse, and was losing flesh and strength, she called in another, her present medical attendant. He examined her per vaginam and at once recognised the nature of the case, but apparently overlooked the distension of her bladder, being put off his guard, possibly, by her assurance that she frequently passed water, often as many as six times in the night, and constantly in the day. At any rate, without examining the hypogastric region, and without emptying the bladder, he endeavoured, at his first visit, to restore her uterus to its proper position, and made a second attempt on the following day. Failing in this he asked me to see her. I found her lying in bed, complaining of much pain in her abdomen, very weak, and very thin, and very anxious. Skin and tongue dry; no

appetite, but considerable thirst, and occasional attacks of retching and sickness. On inquiring about the water she told me that the water did not run away, but that she had an almost constant desire to pass some, and that this she did in small quantities at a time, with much straining and difficulty. On examination I found the vulva swollen and œdematous; the vagina extremely tender; the fundus uteri just within the vulva; the os small, and high up above the pubes. I emptied the bladder, without difficulty, of nearly three quarts of water. It was somewhat high coloured, but not offensive. The last few drachms alone appeared to contain a little blood and mucus. Placing her then in the knee-elbow position, with but little difficulty the uterus was restored to its normal position. From the very considerable local tenderness that was present, coupled with her great prostration, I feared she might do badly, but in a note I had from her medical attendant some three weeks afterwards I learnt that, beyond an inability to retain her water, and which persisted for about ten days, she had had no further bad symptom.

These three cases were all instances, I believe, of complete retroversion of the gravid uterus arising in a sudden manner. In the two fatal ones necrosis of the mucous lining of the bladder had taken place, in the first to such an extent that the catheter became repeatedly blocked with the *débris,* and in the second, when the catheter was subsequently used, almost pure blood was each time withdrawn. In all three, in addition to very considerable prostration and emaciation, there was marked dryness of skin, and this was the chief symptom of uræmic aspect present. In none was there any head symptom from first to last. Unfortunately, in the absence of any post-mortem, one cannot speak with any positiveness of the local condition beyond the probability, from the symptoms present, of more or less peritonitis or pelvic cellulitis in the neighbourhood of the bladder, and, in the two fatal cases, of disorganization of its mucous membrane.

I am afraid we must conclude from the history of these

cases that much uncertainty still exists among some practitioners both as to the diagnosis and treatment of this condition.

Towards the settlement of its treatment, at all events, upon a clear basis, I trust this evening's discussion may contribute something.

In the account of Dr. Chambers's case in the 'Obstetrical Journal,' after referring to a consultation with reference to it between Drs. A, B, and C, it is stated that "it was decided to empty the uterus and replace it," and "that this was readily effected." In the report of the July meeting of the Society in the August number of the Journal, in Dr. Chambers's account of the case, he simply says, "on passing a hand into the vagina a fœtus of four or five months' maturity was removed."

It struck me on reading the first notice of the case that the statement with reference to it might possibly favour the idea with some that it was the rule to bring on labour in these cases, and the point not being further referred to in the published account of the July meeting, I venture now to allude to it. I apprehend that in no case should we be justified in bringing on abortion until we had given a fair trial to other measures, or unless the patient's condition was such that decided benefit would accrue to her from emptying the uterus. There are indeed many cases on record where nature has in this way endeavoured to remedy matters for herself. In the first case I have narrated abortion followed within a few hours of the reposition of the uterus, and I have little doubt, from the patulous condition of the os, that the process had already commenced before I saw her.

Another point worthy, I think, of some attention, is as to the time when interference is desirable. Dr. Barnes says, p. 253, 'Obstetrical Operations,' "In a fair proportion of cases, if seen early, simply keeping the bladder and rectum empty, and rest in the prone or semi-prone posture, is enough to obtain restoration of the uterus; and unless very

urgent distress continue, time should be afforded for this spontaneous cure."

Dr. Tyler Smith says, p. 129, 'Manual of Obstetrics,' "In some cases these means (catheterization and the keeping the bowels open with aperients) are so efficient that no further inconvenience is felt, and the uterus rises into the abdomen as pregnancy advances."

Dr. Ramsbotham, p. 657, 'Obstetric Medicine and Surgery,' says, "It is most probable, if the accident be recent, especially if the retroversion be only partial, that emptying the bladder alone, without any other means being used beyond preserving a state of perfect rest, will be sufficient to effect the return of the uterus to its normal position."

Now, I confess that my own inclination tends in the other direction, and that I fail to see what is gained by at all delaying the reposition of the uterus. Its retroversion is an abnormality, and the interference it produces in the retroverted condition with the action of the bladder and bowel, and the easy possibility of peritonitis and its results occurring in the pelvis, appear to me sufficiently strong arguments in favour of its replacement as soon as practicable after its displacement is discovered. I might add that the comparative ease of the procedure at an early date is an additional reason for then making the attempt. It has happened to me several times to have to replace a retroverted uterus within a short period of its occurrence, and it has never then proved anything but a simple and easy procedure.

As regards the best position for the patient to be placed in during the operation, in each of the three cases of which I have given particulars the patient was placed on her knees with her shoulders lowered, and most authorities concur in recommending this position as the best, with the idea that in it we are aided by the force of gravitation. A modification of this is suggested by Dr. Barnes, who says, "place the patient in the prone position with the nates elevated."

Dr. Ramsbotham, however, strongly opposes it as being

"inconvenient and indelicate." He adds "If, however, this posture were absolutely necessary, or possessed any great superiority over every other, even these disadvantages would carry with them little weight; but in my opinion this is by no means the case, for in every instance except two where I have thought it necessary to use manual efforts for the purpose of reducing a retroverted uterus I have succeeded by the introduction of the fingers into the rectum and vagina while the patient was lying on her left side in the common obstetric position, and in the cases where I was disappointed I failed also even when she was placed on her elbows and knees." Since noticing this remark of Dr. Ramsbotham's I have not met with any grave case of retroversion, no case, that is, of long duration or attended with considerable impaction; but a short time since a medical friend, not practising obstetrics, sent to me one morning a patient in whom, from her symptoms, he suspected retroversion had taken place on the previous day. I found it was so, and that she was entirely unable to pass her water. After emptying the bladder, and with the patient in the usual obstetric position, by making steady pressure on the fundus in such direction as to avoid the obstruction of the sacral promontory, I without any difficulty replaced the uterus. Should I meet with another of the graver cases I should certainly try if I could not accomplish the reposition without giving the patient the fatigue and unpleasantness of assuming the knee-elbow posture.

As regards the exact manipulation most desirable, different opinions have been expressed. Dr. Barnes says, "pass two or three fingers, or even the whole hand, into the rectum; apply the tips of them to one side of and under the uterine globe; push the globe upwards and to one side of the promontory of the sacrum, so as to clear this projection." A few lines further on Dr. Barnes writes, "You adopt the bi-polar principle to the reduction; first by finger in the vagina pull the cervix uteri backwards towards the right acetabulum, so as to bring the uterus into the left oblique diameter of the pelvis; then, the fingers in

the rectum, push the fundus towards the left sacro-iliac synchondrosis."

Dr. Tyler Smith says, "Introduce the forefinger of one hand into the vagina, and the forefinger of the other into the rectum, the os should then be drawn down with one finger or the uterine sound and the fundus elevated with the other."

Dr. Rigby, on the other hand, in his 'System of Midwifery,' p. 811, says, "We agree with Richter in the utter inutility of attempting to bring down the os uteri; in most instances we can hardly reach it with the tip of the finger, and even were we able to lay hold of it we should run little or no chance of moving it so long as the fundus is impacted in the hollow of the sacrum. The fingers in the vagina must endeavour to raise the fundus, and in doing so may be assisted by one or two fingers in the rectum according to circumstances; the very effort to press per vaginam against the fundus necessarily puts the anterior wall of the vagina upon the stretch and thus tends of itself to bring the os uteri downwards. In all cases," he adds, "where the reposition of the uterus is at all difficult Professor Naegelé recommends the introduction of the whole hand into the vagina."

I apprehend the truth will be found to lie between these two views. In some cases where the os is very small, as *e.g.* in some first pregnancies, and where it is very high up, it certainly is very difficult, if not impossible, to get the finger into it so as to exercise traction, unless aided by the introduction of the entire hand into the vagina as Professor Naegelé suggests, and the use of a sound as mentioned by Dr. T. Smith would be attended with much danger to the integrity of the ovum. But on several occasions, after raising the fundus to some extent by vaginal or rectal pressure, singly or combined, I have found, as in the three cases narrated in this paper, the completion of the operation much favoured by this little manœuvre. I would suggest, therefore, that at first we attempt reposition of the uterus by fundal pressure simply, per vaginam only,

or per rectum also, according to the severity of the case, observing, of course, carefully to make this pressure in such direc on as to avoid the sacral promontory; and that if unable thus to accomplish our purpose we aid our efforts by traction from the os, rendered easier now by whatever amount of elevation of the fundus we have been able to obtain.

As regards anæsthesia. Dr. Barnes is, so far as I have noticed, the only English obstetrician who recommends the use of chloroform. He says "Give chloroform to the surgical degree." In spite, however, of this high authority, I venture to think that in the lighter cases it would usually be unnecessary, and in the severer ones might add an element of danger. Still, there might be cases in which the predominance of emotional excitement would render it desirable. In the three cases noticed in this paper the women were particularly calm, and co-operated in the efforts made to relieve them to the utmost of their ability. On the whole, I should be disposed to speak of the induction of anæsthesia as only exceptionally desirable, and not to be considered the rule.

Lastly, as to the cause of death. Dr. Barnes thinks "blood-poisoning the most frequent cause of a fatal termination." Dr. T. Smith, peritonitis and irritative fever. Dr. Ramsbotham, irritative fever in conjunction with the local mischief. Dr. Rigby says, "The danger in retroversion of the uterus chiefly arises from the distension or rupture of the bladder, and from the gangrenous inflammation which may take place, not only in it, but also in the uterus and neighbouring parts. The very displacement itself is sometimes immediately attended by alarming symptoms such as faintness, vomiting, cold sweats, weak irregular pulse, as seen in cases of inversion or strangulated hernia." In the two fatal cases I have referred to, in both, when I saw them, the end was not far off and collapse would best express their condition. I apprehend that the cause of death varies with the special circumstances of the case; if the bladder ruptures, then fatal peritonitis would be imminent;

if the retention is sufficiently complete and of sufficient duration to affect the kidneys by backward pressure of the water along the ureters, then, following on disorganization of their structure, would be uræmia; but without either of these occurrences, I imagine, in many cases the gangrenous condition of the mucous membrane of the bladder and its attendant constitutional symptoms would together be sufficient to account for that extreme prostration which gradually leads to death.

Dr. BARNES suggested that, as at the late hour at which the paper had been read it was impossible to do justice to so important a subject, it would be well to postpone the discussion to the following meeting of the Society.

Dr. CLEVELAND seconded the proposition, and it was adjourned accordingly.

DECEMBER 2ND, 1874.

EDWARD JOHN TILT, M.D., President, in the Chair.

Present—55 Fellows and 9 visitors.

Books were presented by Dr. George Hoggan and Mr. T. Osborne Walker.

An engraved portrait of Dr. Paul Chamberlen was presented by Mr. Thomas Taylor, of Birmingham.

Early books on midwifery and allied subjects were shown to the meeting, lent by Mr. Donald Napier, Mr. Geo. A. Brown, of Tredegar, and Dr. E. C. Odling, of Wendover.

Mr. Wm. Allen Fitzrayne, Dr. Albert Venn, and Mr. Hele Payne, were admitted Fellows of the Society, and Dr. Thomas Pigg was declared admitted.

C. R. Brown, M.D., and William Rees, L.S.A., were elected Fellows of the Society.

Mr. Alex. H. Brewer, Dr. Angus Fraser, Mr. Wm. Owen, and Mr. W. A. Satchell, were proposed for election.

Mr. S. H. BIBBY exhibited a cast and said—This antique group represents the circumstantials of a labour in very early times, and was found among a vast assemblage of antiquities in a temple of Venus discovered by General de Cesnola, the American Consul, at Golgas, in Cyprus, some two or three years ago, and brought by him to England and offered to the trustees of the British Museum for purchase, but while they hesitated a bargain was struck with New York, where the collection now is.

It consisted of statues and statuettes, heads and fragments of them in the calcareous stone of the island, archaic vases, oxidized vessels of glass, idols of a monstrous nature, and votive images, ornaments and lamps in painted terra cotta, spear and javelin heads, funeral bandeaux in thin gold, cups and bowls in clay and bronze, &c.

That this group should be found in the collection is not surprising, for Cyprus was colonized by the Phœnicians from the neighbouring mainland, who doubtless established their religion in the island and erected temples in honour of Baal, the supreme divinity of generative power, and Ashtoreth, that of productive power, solemn collosal statues of whom, or of the priests, each with a pleasant smile and dove on hand and other emblems, were ranged around in the long-buried temple. And when the Greeks invaded and took possession of Cyprus they introduced their customs, arts, and religion, and Baal became Herackles, and Ashtareth Aphrodite; and under this sanction were carried on the licentiousness and immorality of the age, and everything appertaining to marriage and the intercourse of the sexes was in conformity with the worship.

To the prevalence of this highly popular idolatry in that quarter the Old Testament bears ample testimony in the description of the scene on Carmel, where no less than 850 priests of Baal and the court were arrayed on one side against Elijah alone on the other, and the denouncing of Ezekiel in the same book accumulate proof of it. In later times, when the Romans took possession of the whole world, other places rose into notice, and the old resorts of worshippers began to fall into decay; and perhaps the severest blow given to this very temple was by Paul and Barnabas preaching Christ at Paphos before Sergius Paulus, and smiting Elymas, the opposer, with blindness, at which time, no doubt, this group was in its niche in the building, and has been now disinterred after eighteen centures have passed away. It is much to be regretted that of the four figures which form the group the bust of the attendant supporting the mother at one end of the 'stool,' and also that of the

nurse sitting at the other end with the new-born infant in her lap, are lost.

Dr. Wiltshire exhibited some old books lent by Mr. Donald Napier. An "Old Bible," in which the process of confinement was portrayed; 'Childbirth, or the Happy Delivery of Woman;' a translation of Mauriceau's work on 'The Diseases of Women with Child,' and 'The Expert Midwife.'

Dr. Aveling remarked that the seventeenth century works on midwifery exhibited were exceedingly interesting, but not very rare. He would like to take the opportunity of asking the Fellows and the profession in general whether anyone was aware of the existence in this country of either of the three following works:—1. The first edition of Rhodion's 'De Partu Hominis' published in 1532. 2. The first translation of Rhodion's work into English by Richard Jonas, published in 1540, in M.S. and 3. A 'Speculum Matricis' of James Wolveridge, published in 1655.

Dr. Tilt exhibited a plate, presented by Dr. Taylor, of Birmingham, considered to be a faithful likeness of Paul Chamberlen.

Dr. Wiltshire stated that the Royal Medical and Chirurgical Society possessed the original set of forceps belonging to Chamberlen, and had kindly lent them for the inspection of the Fellows this evening.

Dr. Murray suggested that if the books were not very valuable the owners would do well to present them to the Society.

Dr. Aveling stated his belief that the portrait was that of Peter, the inventor of the forceps, and not of Paul, who was the second son of Peter. Paul at the time the likeness was taken must have been about thirty, whereas this was the face of a man of sixty, or of the age of Peter at that date, fifty-seven. The engraver's copy of the original portrait is in the collection of the Medical and Chirurgical Society of London, and he probably made the mistake, for the surname is also wrong, the terminal syllable of it being spelt "lin" instead of "len."

Dr. W. C. Grigg exhibited a specimen of hydrocephalus. The child, of which this head is a sketch, made by Dr. Westmacott on the second day after birth, was born at Queen

Charlotte's Lying-in Hospital on the 19th of November, 1873. The labour was slightly delayed in the second stage, but was rapidly terminated by placing the mother in the knee-elbow posture. The labour lasted seven hours in the hospital, how

long previous to admission could not be clearly made out. The mother was nineteen years old, single, and healthy; concerning the father nothing was known. The child lived to the fourth day, cried, sucked, and moved all its limbs with perfect freedom.

The chief feature in this case is the remarkable conformation of the head; it will be observed that it forms, as it were, another head; its measurement showed the tumour to be slightly in excess of the head proper. The usual form of the head as seen in hydrocephalic children at birth is wedge shaped, with the narrow portion of the wedge at the base of the skull and the wider part at the vertex, with the bones of the skull expanded over the tumour. Here, however, the bones of the head seemed little affected, the parietal bones being evidently arrested in their growth towards the mesial line, allowing the distended brain to escape through the sutures into a bag formed of the expanded brain, the membranes, and the scalp. This condition would lead to the supposition that the great increase of the ventricular fluid took place late in intra-uterine life and with great rapidity. It was the peculiarity of its shape that caused it to be no impediment to labour. Mr. Warrington Haward kindly made the necropsy, it was, however, too long delayed to make out the exact condition of the brain. All that could be clearly distinguished was, that it was the usual form of internal hydrocephalus with the ordinary ventricular expansion.

Dr. Grigg also exhibited a modification in Albert Smith's pessary, consisting of the shaft being made extremely narrow in order not to dilate the lower half of the vagina and thereby weaken the main support of the uterus. It has been used about sixteen times with great benefit in retroflexion, both when the uterus has been bound down by adhesions and redressible. The maintenance of the curve is not essential to its successful application, which may be altered according to circumstances. Two women had already become impregnated whilst wearing it. One woman had been married two years without children, the second was single but had borne

children six years previously, and had been indulging in occasional intercourse ever since.

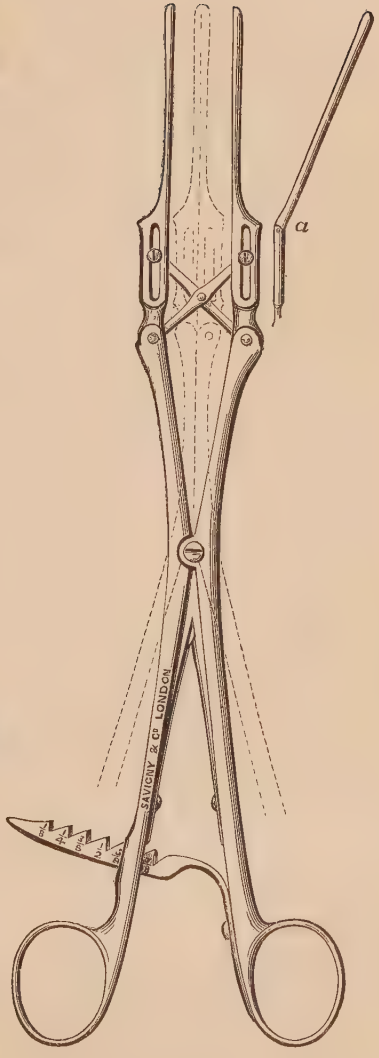
Dr. Grigg also exhibited the rapid dilator after Ellinger's. The blades are made extremely thin, so as to act like a wedge, and their length is limited to one and three quarters inch, in order to prevent the possibility of stretching the uterine cavity, which is not without danger, besides giving rise to much pain. An index in the handles enables the operator to know how wide the blades are expanded. It has been used successfully for contracted external os and for anteflexion with dysmenorrhœa. It requires gentle handling and the expansion to be made gradually; at least twenty minutes is necessary for the operation. It is very convenient for examining internal cervical or inter-uterine growths, as in one sitting the cervix can be so far stretched as to admit the finger readily; and also where it is necessary to inject fluids into the uterus.

Dr. Murray brought before the Society a *fibroid* uterus. The specimen showed the three forms of the disease—*subperitoneal*, *interstitial*, and *submucous*. The case was seen too late to admit of much treatment, otherwise the os uteri would have been dilated, and in all probability the removal of the *pedunculated* intra-uterine fibroid body attempted.

The practical and interesting point which arose was whether the hæmorrhages would have been controlled after the growth had been removed (considering the much enlarged and fibroid state of nearly the *whole* uterus). Dr. Murray was inclined to believe that little or no good would have resulted in this case from any surgical interference.

The uterus had lost most of, if not all, its contractile power, and if so, the cavity left after the removal of the polypus might prove of itself a source of hæmorrhage. The patient was thirty-seven years of age and unmarried; she had been ill for many years, and had been under the care of the late Dr. Tyler Smith, who, about four years ago, after dilating the os and cervix uteri, considered it undesirable to resort to operative measures.

MODIFICATIONS IN ALBERT SMITH'S PESSARY.



RAPID DILATOR, AFTER ELLINGER'S.

Dr. TILT inquired if the loss of blood had been considerable.

Dr. MURRAY replied that it was a continuous slight drain, not in a stream; there were clots which were moulded in the uterus occasionally.

Dr. HEYWOOD SMITH inquired how long the hæmorrhage had existed, and for what symptoms Dr. Murray had been consulted. If hæmorrhage had continued for five years, he thought something might have been done to check it.

Dr. BARNES thought that probably five years ago the growth was intra-uterine, not polypoid; this condition had increased of late. It was well to remove such growths, as thereby the afflux of blood was diminished. The submucous ones caused most hæmorrhage. The other one might have passed into an inactive or passive state.

A communication on "The Nature, Cause, and Treatment of Membranous Dysmennorrhœa," by Dr. GEORGE HOGGAN, was made and illustrated by diagrams and microscopic specimens. The specimen was formed of two different structures continuous with each other, one from the vagina, consisting of the well-known pavement-cells of the part, the other from the uterus, and formed of embryonic tissue in its early stage, and identical with the structure of the decidua. This rare specimen explained the diverse views on the subject, one school holding that it was an exfoliation, and the other that it was an exudation; the fact being that different observers had examined different ends, and therefore structures of the same membrane. From the symptoms of the case the membrane seemed due to inflammation. To the naked eye and under the microscope the vaginal portion resembled such products of inflammation as the skin of a blister, or the membranous cast of the urethra thrown often off in urethritis, and it was therefore concluded that the uterine portion continuous and contemporaneous with it was also due to inflammation; but, *vice versâ*, the uterine portion which was identical with the decidua was probably due to the same cause, *i. e.* excessive vital stimulation, and the vaginal portion continuous with it likewise. It was therefore reasoned that inflammation and excessive vital stimulation were the same thing, the latter expression being now offered as a new and correct definition of inflammation.

DESCRIPTION OF PLATE.

a, *a*, *a*. Subperitoneal fibroid growths.
b. Uterine tissue.
c. Intra-uterine polypus (submucous).
d. Os uteri.
e. Interstitial fibroid deposits.

D.r Westmacott ad Nat. Del.t D.r 1814.

The rational treatment which had been employed with success was to lower generative action by anaphrodisiacs; the bromide of potassium was given in large doses prior to the commencement of the period.

Report of the Sub-Committee on Dr. Meadows' specimen of Membrane passed by a patient suffering from Dysmennorrhœa Membranacea.

The membrane exhibited by Dr. Meadows at the last meeting of the Society was a flattened bag, having the form of the upper portion of the enlarged cavity of the uterus. The curved border of the membrane corresponding to the borders and fundus of the uterus measured nearly four inches; the mouth, in its flattened condition, nearly two inches.

When received by us the outer surface of the bag was smooth, and presented many very shallow sulci and little pits; on the curved border of the sac, which was much thinner than the sides of it, and which measured about one third of an inch in width, these pits amounted to perforations. After inversion the inner surface of the sac was seen to be flocculent, so that before it came into our hands, probably during its extension from the uterus, the bag had been turned inside out.

In some places the membrane was pale and transparent, in others brownish in colour and opaque, a condition evidently caused by retention of blood here and there in its vessels. It was of an irregular thickness, some parts being as thin as tissue paper, others having a thickness of about one sixteenth of an inch. In the curved border of the sac there was an opening which evidently corresponded to the opening of the Fallopian tube of one side; on the opposite border were several irregular openings, one of which probably corresponded to the opening of the Fallopian tube of the other side. The margin around the mouth of the bag presented a very irregular outline.

Under the microscope the membrane was seen to be composed of round cells, small fusiform cells, and blood-vessels, embedded in a structureless matrix. No distinct evidence was obtained of the presence of columnar epithelium. The little pits visible to the naked eye were seen to be channels running through the membrane, and were, without doubt, glands deprived of their epithelial lining. No evidence could be obtained of the presence in the tissue of products of inflammation; indeed, it presented a structure similar to that of the healthy mucous membrane of the uterus, except that the round cells in it were more numerous than they are in the latter—a condition we would naturally expect on account of the enlargement of the uterus from which the membrane was expelled.

There can, we think, be no question that the specimen referred to us was the superficial layer of the mucous membrane of the upper portion of the uterus; but of the condition, general or local, which led to its detachment as a whole, we have been unable to find any anatomical indication.

J. H. Aveling,
John Williams.

Dr. John Williams said — I am somewhat surprised to find the existence of the mucous membrane of the uterus called in question, because the evidence, on which the belief of its existence rests, appears to me to be incontrovertible. The labours of some of the most eminent histologists, who have lived during the last fifty years, in connection with this subject, have supplied the evidence referred to. It is not my intention to enter into a discussion on the subject, but I would simply state that I have been able to verify the statements of other observers with regard to the existence and structure of the uterine mucosa. One of the microscopical specimens exhibited by Dr. Hoggan at the last meeting of the Society was a section of the decidua vera. It had a structure similar to that of the mucous membrane of the uterus shortly before a menstrual period. The deciduæ have been recently described by Reuchert, Hemorat, and Findlünder, and they have also traced the process of their evolution from the mucous membrane of the uterus, a process which had been in part described thirty years ago. With reference to the specimens exhibited this evening, two of them are portions of

the mucous lining of the vagina, as the pavement epithelium on their surface shows; the third, which is supposed to be the dysmenorrheal membrane cavity of mucus in which are embedded some cells of the disintegrated mucous membrane of the uterus. It is not uncommon to meet with small masses of jelly-like substance in the menstrual fluid in persons who suffer from dysmenorrhœa. They can be hardened in alcohol and sections can be made of them, and these sections present a structure similar to that presented by the specimen exhibited to-night, viz. some round and fusiform cells scattered here and there irregularly and in patches in a transparent substance; occasionally a columnar epithelial cell is met with, but more commonly round and fusiform cells. The arrangement of the cells in the masses alluded to and in the specimen exhibited to-night is similar to their regular arrangement of cells or deposits frequently met with in mucus passed from the bladder. I send round a portion of the dysmenorrheal membrane exhibited by Dr. Meadows at our last meeting. It is mounted as a microscopic specimen, but I show it because the orifices of the utricular glands can be easily recognised in it by the naked eye.

Report on Dr. Carter's specimen of a Six Months' fœtus.

We have examined the fœtus sent to us. We could not determine its weight, as the lungs had been removed, which also precluded us from trying the hydrostatic test. The length of the body was twelve inches. The left testis was within the abdominal cavity; we did not find the right. The eyelids were adherent, and the membrana pupillaris present. The nails had not reached the extremity of the fingers. The hairs were dark and fully formed. No valvulæ conniventes were found, nor were there any convolutions of the brain. These signs would rather fix the age at about six months.

On the other hand, the well-marked fibrous condition of skin, the existence of meconium in the colon in abundance, and the advanced state of ossification of the skeleton, especially in the head, would rather point to a later period of life.

C. H. F. Routh, M.D.,
George B. Brodie, M.D.

CASE OF RETROVERSION OF THE GRAVID WOMB.

By Max. F. Simon, of Lucea, Jamaica.

(Communicated by Robert Barnes, M.D.)

(*Extract from a letter to Dr. Barnes.*)

"I may take this opportunity of telling you of a case of retroversion of the gravid uterus I had, which showed a symptom which, if constant, would, I think, help the diagnosis—I mean the great distension of the perinæum, with extrusion of the posterior vaginal wall and anterior wall of the rectum, more marked, of course, during straining efforts, which were frequent. I was called to the case in consequence of retention of urine, and then my attention was called to the perineal swelling. I passed a catheter and drew off a lot of water, but there seemed to be more still, and the elastic catheter would not pass higher, neither would a silver one. I could not reach the os uteri, it was thrown up so high. Other diagnostic signs were present. After plenty of chloroform I reduced the displacement in the way you show. The moment I moved the cervix laterally a very large gush of urine took place (much to the detriment of my waistcoat and shirt front). The exact moment of reduction I could not tell. After manipulating for some time I felt it all right. I introduced a large Hodge's pessary until next day. The woman did well. This was on October 5th, 1873. In March, 1874, she had a male child at full time, natural presentation. The displacement was sudden. I was and am puzzled to account for the failure to draw off all the urine by the catheter. I must have removed about a quart, and quite as much came afterwards. She required the catheter next day—not afterwards. She suffered for some time afterwards from pains in the thighs and legs."

RETROVERSION OF THE GRAVID UTERUS.

The adjourned discussion on Dr. Gervis's paper on "Retroversion of the Gravid Uterus" then took place. A short abstract was read referring to the principal points of interest.

Dr. Barnes adverted to the importance of collecting into one focus as many cases as possible. The addition of Mr. Max Simon's interesting case would make five cases in one volume of the 'Obstetrical Transactions.' Mr. Simon's case illustrated a very important point in diagnosis. The bulging of the perinæum by the uterine mass, increased under bearing-down effects, was characteristic and did not exist in retro-uterine hæmatocele, the condition which in Dr. Barnes' experience had been most frequently mistaken for retroversion of the gravid uterus. This symptom was not formally indicated in books, but he found it was mentioned in the histories of several cases. Under the reflex expulsive efforts set up by the presence of the uterus low in the pelvis the retroversion or rather the overturning of the uterus was increased. The uterus was now like the fœtal head in labour—its body rolled down in the line of Carus's curve, whilst its neck was more or less fixed at the symphysis pubis. Dr. Barnes then referred to the condition of the bladder. Dribbling, he submitted, was an unnatural state; it indicated retention, and therefore should be taken as an imperative indication to pass the catheter, whereas practically it often threw the surgeon off his guard and led to neglect of this course. It was in the obstruction to the bladder that the chief source of danger to life existed. And here he would ask if Dr. Gervis or any other Fellow could point to a single case of rupture of the bladder. This was often assigned as a cause of death, but he doubted if it ever happened. Long before this event could happen death would ensue from damage to the urinary organs, the gangrene of the mucous membrane of the bladder, the retrograde damage to the

kidneys, urinæmia, shock, and exhaustion. These compensating factors were at work to obviate rupture of the bladder; the dribbling or overflow, the stretching of the bladder, and absorption of part of the urine. Peritonitis also, commonly assigned as a consequence of retroversion, was in fact very rare. In four fatal cases, at least, which he had investigated there was no peritonitis. With regard to treatment he insisted that where there had been considerable bladder damage, as proved by the mucous, purulent and sanguineous urine and constitutional disturbance, attempts at reposition should not be persevered in. If the uterus remained locked, exerting undue pressure upon surrounding organs, it would be better to diminish its bulk and provoke abortion by puncturing the uterus and drawing off the liquor amnii by the aspirator trocar. In a considerable number of cases reposition was easy, and it should be effected; but he had seen death ensue although reposition had been accomplished without difficulty. The shock and urinæmia had already done their work. He had seen with Dr. Brunton a case of retroversion or pelvic gestation at term, similar to the one brought before the Society at one of its earliest meetings. In that case the os uteri could not be found until the patient was put under chloroform. He had delivered by putting down the cervix, and at the same time pushing up the uterus with its contents from the pelvis. Thus rectified, the child was delivered. There was intense albuminuria, caused, as Dr. Brunton thought, by the pressure upon the pelvic and abdominal vessels. The patient recovered.

Dr. Cleveland said the question in his mind was not whether the means employed for the reposition of the uterus were of the most skilful and gentle kind, for on that point he had no doubt, but whether they were used at the proper time. He was at a loss to conceive how a patient, from whose bladder such a large quantity of bloody ammoniacal urine was evacuated, could be in a fit condition immediately afterwards for an operation that could not fail to be attended with considerable shock.

He believed that in such cases it would be better to direct

our remedial measures in the first instance to the bladder, *which was the true source of danger,* by catheterism and perhaps suitable injections into its cavity, but above all by such constitutional treatment as would enable the patient by and by, if the uterus did not right itself naturally, to undergo with a better chance of success the necessary measures for reduction. He further wished to ask if such extreme cases ought to occur at the present day, and to express a hope that through this discussion attention might be drawn to the risk incurred by neglecting retention of urine in the early months of pregnancy.

Dr. George Roper said that the diagnosis of retroversion of the gravid uterus was generally not difficult. Retention of urine was commonly one of its first signs. Stretching of the anterior wall of the vagina and consequent drawing up of the urethra and concealment of its orifice high up behind the symphysis pubis, rendering catheterism difficult, were strong indications of its existence. Retention of urine commonly commenced during the third month of pregnancy, because at this period the length of the uterus equalled the antero-posterior diameter of the pelvic cavity. That in a certain class of cases retention of urine did not occur at such an early period, viz. where the uterus was turned topsy-turvy. Here the long axis of the uterus corresponds to the axis of the pelvic brim, and the uterus continues to grow in its reversed polar position till a later period of pregnancy. The cervix here pointing upwards grows in an upward direction into the abdominal cavity without exerting injuriously any longitudinal pressure. A case of this kind in the sixth month of pregnancy had been observed, in which the uterus, apparently by its own contraction to expel its contents, underwent self-rectification, casting out the ovum with membranes entire.

Dr. Brunton said that as Dr. Barnes thought it of so great importance to note every sign and symptom present, he would remind Dr. Barnes that in the case alluded to there was an oblique furrow on the abdominal surface, giving

one the impression of the existence of twins. The furrow, no doubt, was caused by the doubling over of the uterus.

Dr. Wynn Williams remarked that there was one interesting particular with regard to retroversion of the gravid uterus not alluded to by previous speakers, to which he wished to call the attention of the Fellows of the Society, and at the same time elicit their opinions thereon. It was as to how far the parturient female who was once the subject of retroversion was liable to a recurrence on a subsequent occasion; his experience led him to believe that she was peculiarly liable to a recurrence of the evil. A patient consulted him, suffering from retroversion; she had aborted about the third month on two occasions. The uterus being replaced, a "Hodge" was inserted. The patient became pregnant, the "Hodge" being left *in sitû* until the patient had quickened, the patient going her full time. Again she became pregnant; nothing was done, and she aborted. The next time she became pregnant she consulted him between the second and third month, fearing another recurrence. The uterus was carefully lifted into its normal position and a "Hodge" inserted, which was retained until the patient quickened, when it was removed, the patient going her full time. This was one only of many such cases he had met with. Some few years ago he was sent for to a patient who had been allowed to remain three days without passing any urine; she was between the fourth and fifth month of pregnancy. The bladder being enormously distended with urine, he drew off two of the largest sized chamber utensils full of water. In a day or two the whole of the mucous membrane of the bladder was passed in a gangrenous condition and the patient died of blood poisoning, not uremic, but septic.

A patient consulted him at the Western General Dispensary when he was connected with that institution, suffering from retroversion of the gravid uterus at about the seventh month. She consulted him for the purpose of having premature labour induced, stating she had on all previous occasions aborted or had had a premature labour. The urine was drawn off for several days and either twenty or

thirty drops of liquor ergoti administered three times a day in the hopes that the contraction of the muscular fibres of the uterus might assist in righting its position. Before the end of the week the uterus acquired its natural position and the patient went her full time. Whether the administration of the egot or the drawing off of the urine was the cause of the replacement it is not easy to determine.

Dr. Aveling observed that the weight of the gravid uterus was sufficient to render the influence of gravitation worthy of consideration. He would therefore take exception to that portion of Dr. Gervis's excellent paper which advised the lateral recumbent position as the best. The knee-elbow posture he believed would be found in all cases to favour the removal of the fundus uteri from the pelvic into the abdominal cavity.

Dr. Galabin called attention to a mode of treatment from which he had found benefit in one instance, namely, gradual pressure by an air-ball pessary in the rectum, introduced for a few hours at a time. The case was one in which attempts at reduction both in the knee-elbow position and in the side position under chloroform had failed. The use of air-ball pessaries in the vagina had only slightly raised the fundus, and there was reason to believe the uterus fixed by adhesions. Treatment was interrupted before the uterus had been completely restored, but the difficulty of micturition was entirely relieved. His own experience was limited to six cases of complete retroversion of the gravid uterus, all at or about the fourth month of pregnancy. Of these, three were restored at once by the fingers in the rectum, counter-pressure being applied, not to the os or cervix by the vagina, but by the hand extended above the pubes. In one of them a previous attempt in the side position under chloroform had failed, and he was led to believe that the knee-elbow position presented greater advantages.

In another case the uterus was replaced at the end of three days by the use of an air-ball pessary in the vagina, after an attempt at immediate reduction had failed. In the sixth complete restoration was procured by means of a copious

enema, which had been given as a preliminary to further treatment. In none of the cases did abortion occur.

Dr. J. Braxton Hicks said that as the time was so short he would give the results of his experience in a very few words. He had never seen any one die from retroversion of the pregnant uterus excepting one patient who had advanced so far as the seventh month and a half. In this case there had been old adhesions binding down the uterus together with chronic and recent peritonitis. There had been no bladder trouble. Dr. Hicks was present at the delivery of the case of Dr. Oldham's, which was at full term, and he believed there had been no retention. With regard to the means he had taken to restore the uterus, he had never had any real difficulty, although he knew such cases did sometimes occur. He always had the urine drawn off two or three days, giving opiates to lessen irritability, and then, placing the patient in the knee and elbow posture, he gently pushed up the fundus. If the opposite pole, being above the brim, did not come down, he pressed it down from the exterior, just above the symphysis pubis. If these measures, carried out gently and slowly, failed, he placed the patient on the side and introduced an empty air bag into the vagina, and then inflated it; a T-bandage with perineal pad was applied externally to retain it, and generally about the second, or not later than third day, he had found the uterus restored. He had never found occasion to apply the fingers or bags per rectum.

Dr. Palfrey remarked that on hearing Dr. Gervis's paper he thought they were three very unfortunate cases. In the London Hospital he had had several cases, but death was a very rare sequence—two only, out of twenty-seven cases. The last case he had seen occurred in Essex; six medical men had attempted to pass a catheter, and failed. He had succeeded with the greatest ease in passing one with an olive-shaped end (if necessary, a larger-sized one could be passed over this), where the finger had failed to detect the urethra after nearly two hours, trial.

Dr. Godson called attention to the effect produced upon the kidneys in cases of retroversion of the gravid uterus, an

increased secretion occurring for days after the first evacuation of the bladder. This rendered it important that the catheter should be passed very frequently in order to avoid distension of the bladder. He remembered a case in point in which 200 ounces were first drawn off, next day 102, the following 104, but dropping to an average of 48 ounces directly the position of the uterus was restored. The exfoliation of the mucous membrane of the bladder did not necessarily cause death, there being a specimen in the museum of St. Bartholomew's Hospital of the whole of the mucous membrane of the bladder, with abundance of muscular fibre at the back, which was passed from the urethra of a woman in whom subsequently the uterus righted itself, allowing her to give birth to a child at the full time, the woman being still alive but unable to retain her urine more than a few minutes, a contracted bladder evidently existing.

Dr. Edis had met with several cases. In one the patient had been allowed to go nearly three days without any relief to the bladder, the fact of pregnancy having been overlooked. Nearly ten pints of urine were drawn off by the catheter, the patient placed in the knee-shoulder position, and the retroverted uterus replaced by pressure through the rectum. In another instance two miscarriages at about the fourth month had taken place previously, and was only averted a third time by restoring the uterus to its proper position and inserting a Hodge, the patient going her full time. He thought the knee-shoulder position by far the best, care being taken to press the fundus to either side and not against the promontory of the sacrum. He had never had to resort to anæsthesia in these cases.

Dr. John Williams thought that ergot relieved the retroverted condition and was of much service in these cases.

Dr. Hayes doubted the occurrence of sudden retroversion of the gravid womb. The urgent symptoms—retention of urine, great abdominal pain, tenesmus, &c.—supervened suddenly. But this was the case almost invariably where no thought of a sudden retroversion was entertained. Hence the supposition, now given up by most authorities, that dis-

tension was the cause of, and not caused by, the retroversion of the uterus. The distended bladder, however, interfered greatly with, often quite prevented, the uterus regaining its normal position, which, unless bound down by adhesions, it had always a tendency to do. This was clearly seen to be so by numerous cases where simply by rest and the constant evacuation of the bladder, maybe with the aid of an air pessary in the vagina or rectum, the uterus righted itself. Why not imitate this plan in such urgent cases as some of those recorded by Dr. Gervis and other Fellows, in which grave injury to the bladder or kidneys, or to both, was so evident? Do not proceed in these cases to hasty and forced reposition, which has resulted so often in fatal shock, but enjoin rest, keep the bladder empty by catheter, and give the uterus time to gain its normal position. This would be greatly helped by placing in rectum or, better, in the vagina an air pessary, which would start the upward movement of uterus.

Dr. Gervis, in reply, said he had not observed that bulging of the perinæum by the fundus or the retroverted uterus to which Dr. Barnes referred, at all events when retroversion occurred in the early months of pregnancy. In none of the three cases narrated had he noticed this appearance. In one the vulva was œdematous. He was scarcely disposed to think it occurred with sufficient uniformity to be considered diagnostic. The question of the propriety of restoring the uterus to its proper position when the bladder was seriously implicated, as alluded to by Dr. Cleveland and Dr. Hayes, was, of course, one of the greatest importance. He could only say that in the cases narrated there was no great difficulty in effecting the reposition, and that, certain leading principles of treatment being agreed upon, the details might be influenced by the circumstances of each case. He still was inclined to think that no great gain, if any, arose from the knee-elbow position. If one pictured to one's self the situation of the retroverted uterus when a woman was in the knee-elbow position its axis would be still rather upwards and backwards, and it must be the pressure of the fingers,

and not gravity, which accomplished its reposition. On the question of the early replacement of the uterus he still thought that this should be accomplished as soon as its displacement was discovered; it was then comparatively easy, and even if the bladder could be saved from injury by drawing off the water there was still the pressure upon the rectum to be considered and the possibility of the occurrence of peritonitis, as in the case narrated by Dr. Hicks. He begged to thank the Society for their kind attention to his paper.

THE INDICATIONS AFFORDED BY THE SPHYGMOGRAPH IN THE PUERPERAL STATE.

By Mr. Fancourt Barnes.

(Communicated by Dr. Roper.)

Dr. Mahomed, among his numerous sphygmographic researches, was, I believe, the first to point out the fact that women during the later stages of pregnancy generally exhibit high-tension pulse tracings. This observation is completely borne out by more extended experiments on pregnant women made by myself.

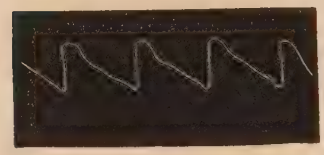
It seems to me, however, that, although patients under the influence of pregnancy do indeed present an unusually high tension, this is developed to a remarkable degree in primiparæ (Fig. I, 1, 2, 3, 4). It would seem to be dependent in some measure, if not wholly, on the following causes:—Hypertrophy of the heart due to its increased work during pregnancy; the increased amount of blood; the additional pressure on the kidneys, caused by the additional effete matter to be by them excreted; the vascular system not having accommodated itself to the added physiological work it now has to

perform; the functional increase of nerve-force in pregnancy.

Among the consequences of these conditions is the known predisposition of primiparæ to albuminuria and eclampsia.

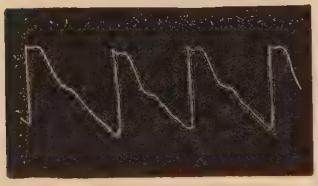
If, then, the primipara is exposed to the combined attacks of so many dangers, she should be guarded during the puerperal state against any sudden chill or inaction of the bowels for these are amongst the factors of albuminuria.

FIG. I.

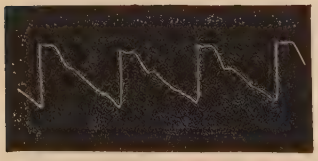


1. A high-tension pulse in a primipara. Not yet in labour.

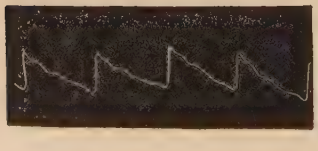
2. A high-tension pulse in a primipara. Not yet in labour.



3. A high-tension pulse in a primipara. Not yet in labour.



4. A high-tension pulse in a primipara. Not yet in labour.

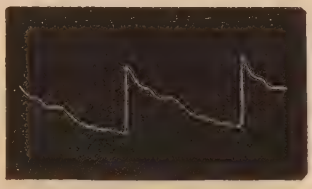


5. Puerperal convulsions. Taken five minutes after a fit. Albumen $\frac{3}{4}$. High tension.

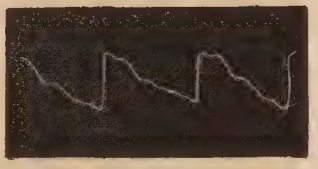
It would seem that puerperal tracings require a special or, as it were, puerperal interpretation; for although the tracings shown (Fig. I, 1, 2, 3, 4), indicate such a degree of high tension as would under any other circumstances but pregnancy almost surely be accompanied by albuminuria, not

FIG. II.

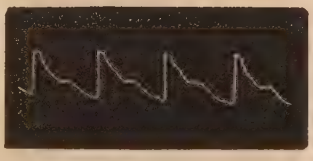
1. Female pulse of ordinary health. Dicrotous.



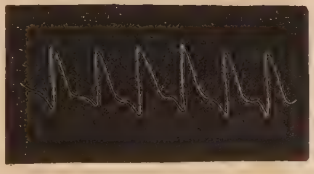
2. Same pulse in extreme nervous excitement. Very high tension.



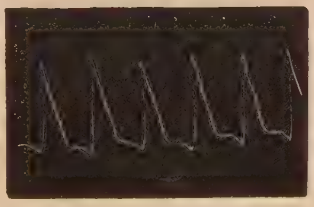
3. Male pulse of ordinary health. Dicrotous.



4. Same pulse in vascular excitement (intoxicated). Low tension.

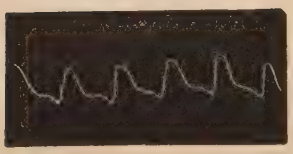


5. Pulse of "milk fever," *i. e.* vascular excitement. Low tension.



M. F., æt. 28. Primipara. First stage of labour.

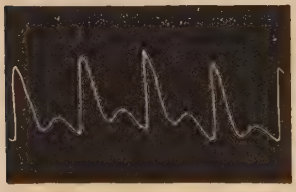
Fig. III.



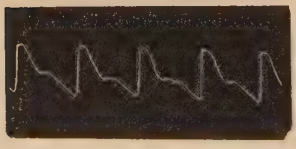
1. Aug. 1st. Temperature 98·9°. Pulse 100.

2. Aug. 2nd. Temperature 98·9°. Pulse 56. High tension. After delivery.

3. Aug. 3rd. Temperature 98·7°. Pulse 98. High tension almost gone.



4. Aug. 4th. Temperature 98·8°. Pulse 100. No high tension.



5. Aug. 5th. Temperature 98·9°. Pulse 100.

This patient was delivered by the long forceps.

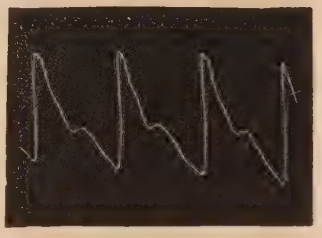
one of the patients from whom these tracings were taken had even a trace of albumen in the urine; nor were blood-crystals indicative of the prealbuminuric stage, as pointed out by Dr. Mahomed, to be found in it. They are neverthe-

E. S. A., æt. 24. Primipara. In labour.

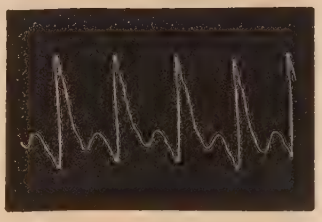
Fig. IV.

1. Sept. 5th. Temperature 98·6°. Pulse 80.

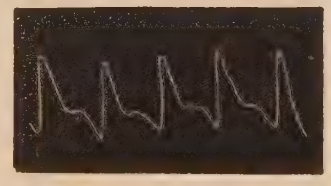
2. Sept. 6th. Temperature 98·9°. Pulse 80. Delivered.



3. Sept. 7th. Temperature 101·2°. Pulse 100.



4. Sept. 8th. Temperature 99°. Pulse 90.



Natural labour.

less on the verge of a precipice, having blood-crystals and albumen in the abyss below.

During pregnancy there occurs, as my father has insisted on in his Lumleian Lectures on 'The Convulsive Diseases of Women,' an accumulating increase of nerve-force which is stored up to be ready for use in labour. This nerve-force has been mentioned among the exciting causes of high tension in the puerperal state, and it would seem to be not the least among them.

Nervous excitement alone, without the presence of other conditions, is capable of producing as high tension suddenly in an ordinary healthy pulse as Bright's disease itself.

That nervous excitement alone can exercise so powerful an influence on the circulation is illustrated by the tracings Fig. II, 1, 2, taken from a young lady suffering under an unusual access of it. She was not pregnant, and was in ordinary health; compared with her ordinary pulse tracing (Fig. II, 1), the tidal wave is developed to a high degree (Fig. II, 2). This change would seem to bear out the idea.

The usual course of events from the moment of delivery until convalescence is as follows. Soon after delivery, the high tension under favorable circumstances quickly disappears. On the second or third day, when the milk-fever tracing shows itself, the high tension is found to be gone. From this date it ought not to be seen again. If it should appear again, it is because some condition has arisen, such as a sudden chill, which throws a strain on the kidneys, or some inaction of the bowels or blood-poisoning, causing high tension and predisposing to albuminuria.

On the second or third day after labour a most characteristic tracing appears (Fig. VIII, 2) if the patient has what is called milk-fever. It is a full, soft, and somewhat dicrotous pulse of 120 beats per minute, usually without any signs of tension. The percussion stroke in this tracing, speaking of it generally, is well developed and more persistent than is the case in continued fevers. It is a short-lived tracing.

The pulse from this date, that is, milk-fever, will now gra-

dually return to its normal flow unless any unfavorable complications arise (Fig. VII, 4, 5, 6).

This milk-fever tracing is usually accompanied by a temperature of 103° or 104° Fahr., which also gradually subsides step by step with the pulse tracing as it reassumes its usual shape. Sometimes, however, high tension may appear in a pulse after delivery hitherto free from it (Fig. III, 2). Here is an example of a considerable degree of high tension appearing after labour without any of its attendant evils. But this patient was delivered by the forceps, and I believe the high tension seen in her case on the day after the operation might be sufficiently accounted for by the nervous excitement caused by the exhibition of choroform and the use of the forceps. At all events, the high tension in this instance was very transient, as the subsequent tracings show (Fig. III, 3, 4, 5).

The remarkable tracing which is invariably found with the milk-fever, I believe, is merely due to the vascular excitement consequent on the secretion of milk. If this tracing is compared with that taken from a drunken man (Fig. II, 4) it will be seen to possess the same qualities, being full, soft, and somewhat dicrotous.

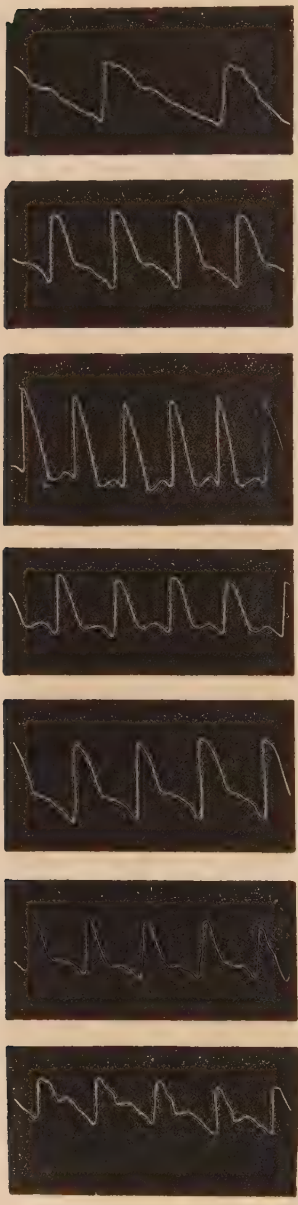
A patient with milk-fever shows some remarkable points of similarity to the condition of a man under the influence of alcohol. They both have headache, both are in a more or less confused mental state, both have an almost identical pulse tracing, and, lastly, in both is the febrile tracing equally transient.

Its natural tendency is gradually to subside into the ordinary tracing of health. A tendency to high tension is sometimes seen in the milk-fever pulse (Fig. VI, 4), and it is then that prophylactic measures against albuminuria, such as a sharp purge, should be had recourse to, when the tension will generally diminish and disappear and the threatening albuminuria be averted.

The clinical value of sphygmographic tracings in the puerperal state lies in the certain forewarning they give of coming evil. For instance, if a tracing is seen to be in-

H. F., æt. 22. Primipara. First stage of labour.

FIG. V.



1. July 21st. Temperature 98·9°. Pulse 75. High tension.

2. July 22nd. Temperature 98·8°. Pulse 80. After delivery.

3. July 23rd. Temperature 104·4°. Pulse 120.

4. July 24th. Temperature 102·3°. Pulse 108.

5. July 25th. Temperature 101°. Pulse 100.

6. July 26th. Temperature 99°. Pulse 100.

7. July 27th. Temperature 98·6°. Pulse 100.

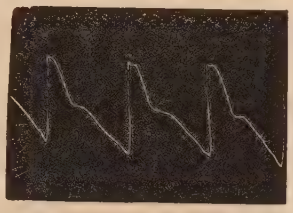
Natural labour.

creasing in tension and diminishing in dicrotism we are now in a position, if we make use of the light thrown on the subject by Dr. Mahomed in his paper "On the Etiology of

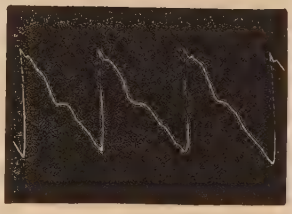
E. S. A. M. A. P., æt. 23. Primipara. In labour.

FIG. VI.

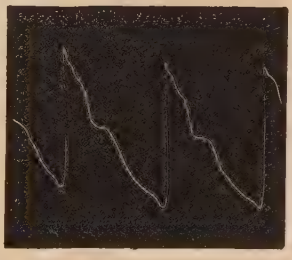
1. June 24th. Temperature 98·8°. Pulse 80.



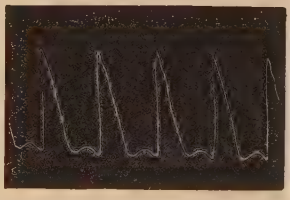
2. June 25th. Temperature 98·9°. Pulse 80. After delivery.



3. June 26th. Temperature 98·9°. Pulse 80.



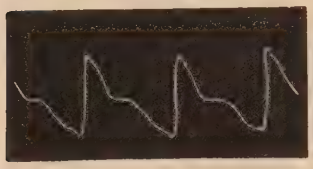
4. June 27th. Temperature 103·5°. Pulse 120.



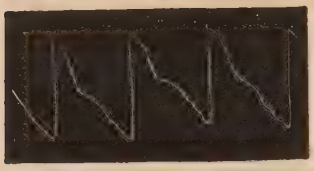
Natural labour.

S. J. S., æt. 32. Fourth pregnancy. Second stage of labour.

FIG. VII.

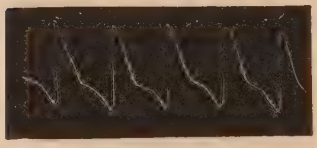


1. Aug. 3rd. Temperature 98·6°. Pulse 80.

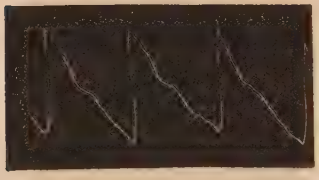


2. Aug. 4th. Temperature 98·6°. Pulse 84. After delivery.

3. Aug. 5th. Temperature 103·5°. Pulse 120.

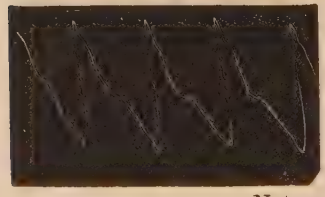


4. Aug. 6th. Temperature 99·2°. Pulse 100.



5. Aug. 7th. Temperature 98·9°. Pulse 80.

6. Aug. 8th. Temperature 98·9°. Pulse 82.



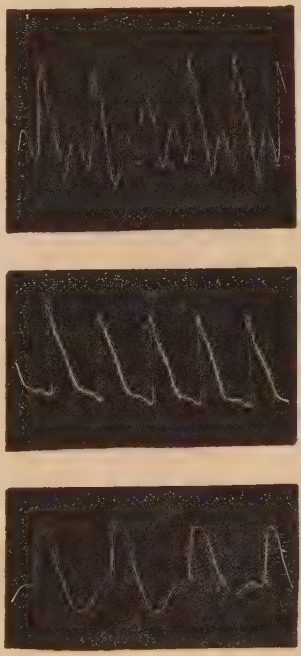
7. Aug. 9th. Temperature 98·7°. Pulse 80.

Natural labour.

Bright's Disease and the Prealbuminuric Stage,"* to predicate with almost absolute certainty albuminuria with its usual puerperal complication, eclampsia. This is particularly to be noticed from the appearance of the milk-fever tracing.

The high tension found in puerperal convulsions is illustrated by a tracing (Fig. I, 5) taken from a patient about five minutes after an attack. During seven weeks that I was resident in the Rotunda Hospital this was the only case of convulsions that came under my observation, and I attribute the immunity from this disease to the careful prophylactic measures resorted to by the master, Dr. George Johnston. This patient recovered. On the day the tracing was taken the urine contained two thirds albumen.

FIG. VIII.



1. From a patient with typhoid fever, by Dr. Mahomed. Hyperdicrotic.

2. From a patient with milk-fever, by myself. Nearly fully dicrotous.

3. From a patient with typhoid fever, by Dr. Mahomed. Hyperdicrotic.

* 'Med.-Chir. Trans.,' vol. lvii.

We may often turn off these dangers by the ordinary means of relieving tension—purging, diuresis, and it may be by bloodletting.

These considerations would suggest that the prophylactic treatment of albuminuria and eclampsia is not wholly out of the reach of those who would seek it in this direction. Many more clinical facts than are touched on here must needs be brought to light under more extended observation.

I have not seen any detailed sphygmographic account of the pulse in the puerperal state, and thought that such an account might not be wanting in interest to this Society.

The sphygmograph gives early and timely warning of the above-named conditions; it is herein that I imagine lies its real and as yet unknown value in the puerperal state.

Report on specimen of the parts in immediate relation to, and in connection with, a retro-uterine and extra-peritoneal hæmatocele, exhibited at the July Meeting by Dr. Rogers.

The cavity has been much torn open from above, and is large enough to contain a fœtal head at term. The uterus is elongated to about three and a half inches, and is flattened by the pressure against the pubes. The cavity that contained the clotted blood was bounded, except where surrounded by uterus, bowel, &c., by a thick adventitious membrane composed of granular matter.

The question at issue is whether the case was one of menstrual hæmatocele or one resulting from tubal pregnancy and rupture.

The history is not sufficiently accurate for the exact determination of this point.

The patient had suffered from hæmorrhage on several occasions, during one of which attacks the hæmatocele might have occurred; and the uterus contained no evidence of decidua to point to the existence of pregnancy.

On the other hand, we consider it not impossible that it might have been the result of pregnancy.

The patient herself thought she might have been pregnant, though she never said so either to her medical man in the country or to Dr. Rogers, but told her husband she thought she might have been. In the absence of further evidence the enlarged size of the uterus might point to probable pregnancy, and as the hæmatocele had, we understand, existed for some little time, the decidua might easily have been thrown off, though we failed to discover any evidence in the mass of the presence of the ovum.

Heywood Smith, M.D.
W. R. Rogers, M.D.

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port. and plates, folio. Lond. 1694 — Mr. Thomas Taylor.

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REPORTS.

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